

# Research information

Yearbook 2023/2024

The essential  
link between  
publishers,  
librarians and  
researchers



## Voices of the industry

Reflecting on key  
developments  
from the year  
in academic  
publishing



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## Leader: Tim Gillett Names and faces



Since its inception some 124 issues ago, *Research Information* has always strived to provide a platform to the key players in the world of scholarly communications, and has derived much of its strength from powerful and informative contributions from leaders in the industry.

The *Research Information Yearbook 2023/2024* is no exception, and we celebrate this with our striking cover featuring the faces of many of the contributors to this issue of the publication.

As ever, the past 12 months has been a time of change in scholarly communications, and this yearbook covers many of the subject areas that have seen crucial developments: artificial intelligence; open science and research; ebook pricing; preprints; user experience; developments in the Global South, India and the Middle East; metrics and citation; and industry standards.

We are also proud to feature interviews with leaders from publishing companies, libraries, and the world of university presses.

*Research Information* will once again be represented at Frankfurt Book Fair 2023, from 18 to 22 October, and we look forward to catching up with as many of you as possible at the event to discuss how you can become part of future issues of the magazine.

@researchinfo

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Reflections on the REF 2021: Use of a research information management (RIM) system to support output collation and curation processes

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Which AI-based editing tool is most effective for research institutions?

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Research  
information

# AI, the new frontier – opportunities and challenges

**Artificial intelligence is the future for all industries – especially scholarly publishing, writes Darrell Gunter**

Artificial intelligence (AI) is currently all the rage in our global economy. The launch of ChatGPT broke all of the records for user adoption – Reuters reported that ChatGPT achieved 100 million users in two months.

The AI boom has created a demand for talent, products, services, and so on, that promises a better society. However, we are also experiencing 'bad actors' taking advantage of the situation for personal gain. Unfortunately, we have experienced 'bad actors' throughout our history and, collectively, we must diligently fight against them.

Within scholarly publishing, we have ushered in the internet, digital journals, and books, and now we are witnessing first-hand the benefits of AI, semantic search, IoT, and WEB3. This article aims to provide a context of the history of AI, the opportunities, challenges, new services, and governance.

## The history of AI

The term artificial intelligence was first coined by John McCarthy in 1956, when he held the first academic conference. But the journey to understand if machines can think began long before that. In Vannevar Bush's seminal work, *As We May Think*, he proposed a system that amplified people's own knowledge and understanding.

*As We May Think* is a 1945 essay by Vannevar Bush that has been described as visionary and influential, anticipating many aspects of information society. It was first published in *The Atlantic* in July 1945 and republished in an abridged version in September 1945 – before and after the atomic bombings of Hiroshima and Nagasaki that ended World War Two. Bush expresses his concern for the direction of scientific efforts toward destruction rather than understanding and explicates a desire for a sort of collective memory machine with his concept of the memex that would make knowledge more accessible, believing that it would help fix these problems. Through this machine, Bush hoped to transform an information explosion into a knowledge explosion.

Five years later, Alan Turing wrote a paper on the notion of machines being able to simulate humans and the ability to do intelligent things, such as play chess.

Artificial intelligence, which is sometimes called machine intelligence, is intelligence demonstrated by machines, in contrast to the natural intelligence displayed by humans and other animals. In computer science, AI research is defined as the study of 'intelligent agents': any device that perceives its environment and takes actions that maximise its chance of successfully achieving its goals. Colloquially, the term 'artificial intelligence' is applied when a machine mimics 'cognitive' functions that humans associate with other human minds, such as learning and problem-solving.

The scope of AI is disputed: as machines become increasingly capable, tasks considered as requiring 'intelligence' are often removed from the definition – a phenomenon known as the AI effect, leading to the popular quip: "AI is whatever hasn't been done yet". For instance, optical character recognition is frequently excluded from 'artificial intelligence', having become a routine technology. Modern machine capabilities generally classified as AI include successfully understanding human speech, competing at the highest level in strategic game systems (such as chess and Go), autonomously operating cars, and intelligent routing in content delivery networks and military simulations.

Artificial intelligence was founded as an academic discipline in 1956 and,

in the years since, has experienced several waves of optimism, followed by disappointment and the loss of funding (known as an 'AI winter') followed by new approaches, success and renewed funding. For most of its history, AI research has been divided into subfields that often fail to communicate with each other. These sub-fields are based on technical considerations, such as particular goals (for example, 'robotics' or 'machine learning'), the use of particular tools ('logic' or artificial neural networks), or deep philosophical differences. Subfields have also been based on social factors (particular institutions or the work of particular researchers).

The traditional problems (or goals) of AI research include reasoning, knowledge representation, planning, learning, natural language processing, perception, and the ability to move and manipulate objects. General intelligence is among the field's long-term goals. Approaches include statistical methods, computational intelligence, and traditional symbolic AI. Many tools are used in AI, including versions of search and mathematical optimisation, artificial neural networks, and methods based on statistics, probability and economics. The AI field draws upon computer science, information engineering, mathematics, psychology, linguistics, philosophy, and many others.

The field was founded on the claim that human intelligence "can be so precisely described that a machine can be made to simulate it". This raises philosophical arguments about the nature of the mind and the ethics of creating artificial beings endowed with human-like intelligence, which are issues that have been explored by myth, fiction and philosophy since antiquity.

Some people also consider AI to be a danger to humanity if it progresses unabated. Others believe that AI, unlike previous technological revolutions, will create a risk of mass unemployment.

In the 21st century, AI techniques have experienced a resurgence following concurrent advances in computer power, large amounts of data, and theoretical understanding; and AI techniques have become an essential part of the technology industry, helping to solve many challenging problems in computer science, software engineering, and operations research.

## AI opportunities

We have witnessed – and are witnessing – new AI applications every day now. Detailed below are examples of 10 applications that are currently being used.

- Automated customer support – provides

## 'Publishers who do not adopt AI in their planning will do so at their peril'

answers to fundamental questions, prioritises incoming calls, aggregates data, provides insights, and so on.

- Personalised shopping experiences – provides you with ideas, products, and services that fit your profile and needs.
- Healthcare – analysis of data and connecting content in context and adjacent information.
- Finance – the implementation of machine learning, algorithmic trading, adaptive intelligence, chatbots, and automation into an array of processes.
- Smart cars and drones – self-driving cars and drone package deliveries are already being tested today.
- Travel and navigation – AI helps you to avoid accidents and other barriers, and also provides you with an accurate arrival time during your journey.
- Social media – your profiles on platforms such as LinkedIn, Facebook, Instagram, X, and TikTok are determining what you are routinely seeing in your feed.
- Smart home devices – leveraging smart assistants, AI is now able to manage functions such as the lighting, temperature, and even the security in your home.
- Creative Arts – Watson provides cooks and chefs with a set of ideas for new recipes and wine pairings.
- Security and surveillance – sophisticated technologies such as facial recognition and voice recognition are getting better with each passing day.

## AI challenges, risks, and bad actors

The promise and opportunities provided by AI are many but, as we have already experienced, the bad actors have also pounced on the opportunity to take advantage of the global community.

What are the challenges that we face and must address to ensure that AI is being used in the most productive manner in our society? I am sure the list is long; however, I will start with what I feel is the most urgent.

- Governance – our global policymakers must now urgently establish ground rules and laws to manage the applications, ethics and rules for AI.
- Bridging information gaps in the current algorithms will ensure the AI code includes the complete information. →



→ • Establishing the right questions for the algorithms to answer. The risks of incomplete or biased AI are many. *The New York Times* recently reported, for example, that an eight-month pregnant woman was charged for a crime she did not commit due to faulty facial recognition.

The 2019 Brookings article on AI bias provided a compelling view on the four key challenges to managing bias in AI:

1. Bias built into data
2. AI-induced bias
3. Teaching AI human rules
4. Evaluating cases where there is suspected AI bias.

Each item presents a unique challenge for policymakers, academics, NGOs, and the public. The Algorithmic Justice League is one of the leading advocates working to eliminate AI bias.

There are potential solutions, however: bias auditing tools typically rely on a combination of several methods to detect and analyse bias in AI systems. These methods can include fairness metrics, counterfactual analysis, sensitivity analysis, algorithmic transparency, and adversarial testing.

### Developments in scholarly publishing

The scholarly publishing industry has historically moved slowly to adopt new technology. As chronicled in my *Against The Grain* article titled *As Worlds Collide – New Trends and Disruptive Technologies*, the article addresses the 2001 PSP symposium titled *The ebook: Crouching Dragon or Hidden Tiger?* Publishers and librarians debated the pros and cons of the ebook but, in my opinion, this panel delayed the ebook transformation.

Even though companies such as Collexis and Parity Computing (both acquired by Elsevier) introduced semantic search (AI) back in 2007, we have not seen the publishing industry as a whole adopt semantic search. In my upcoming talk titled *Semantic Search* at the Internet Librarian Conference, I will provide the audience with the current best practices and opportunities.

The current landscape of publishers that have active AI products/services applications include:

- Clarivate, which describes several AI applications in its products and services.
- Digital Science announced a limited and exclusive beta launch of Dimensions AI Assistant – a new research tool that is designed to enhance how users engage with the wealth of knowledge available on Dimensions, which is among the world's largest linked research databases.
- Edanz Journal Selector, which launched in 2012, has been helping researchers to

select the best journal for their manuscript utilising semantic tools.

- Elsevier, which released an alpha version of Scopus AI for researcher testing. This is a next-generation tool that combines generative AI with Scopus's trusted content and data. Its purpose is to help researchers get deeper insights faster, support collaboration, and improve the societal impact of research.
- Underline Science has launched its Digital Video Library, which contains more than 35,000 videos, and its new AI Hub, which lists more than 10,700 AI conference lecture videos.
- Wolters Kluwer has recently acquired Della AI, which is a provider of leading AI technology based on advanced natural language processing (NLP). This technology allows legal professionals to review contracts in multiple languages by simply asking questions.

In my edited volume titled *Transforming Scholarly Research with Blockchain Technologies and AI*, chapters six, eight, and 10 provide several potential uses of AI in scholarly publishing.

### AI hardware and intellectual capital

Currently, ChatGPT is all the rage but, if you want to maintain control and privacy of your intellectual capital, you should not use it. A group of Samsung engineers recently used ChatGPT to assist them in writing some new code. They made the mistake of entering their proprietary code into ChatGPT and, thus, their proprietary code is now freely available to the world.

This incident highlights the need for companies to have proprietary AI tools requiring high-performing PCs (or workstations). These workstations require high-performing chips by NVIDIA. The demand for these high-performing chips is very high, as every industry will need to have micro internal AI applications powered by high-performing quality workstations. MAINGEAR, a manufacturer of high-performing workstations and partner of NVIDIA, is well known as one of the leaders in building high-performing PC workstations. A recent *TechRader* review rated them the best PC for gamers that require high-performing PCs. Companies from all industries will require these high-performing PCs to power their internal AI applications.

### The crystal ball

My crystal ball shows the following:

- The AI wave is real and gaining momentum every day.
- Publishers who do not adopt AI in their planning will do so at their peril.
- The governance of AI is crucial, and all



Darrell Gunter: 'Our global policymakers must urgently establish ground rules'

stakeholders in it must be prepared to be active participants.

- Partnership opportunities will provide the publishing community to focus on what it does best, which is to publish the world's best research.

### Summary

AI began its journey in 1958 and has grown immensely over that time. Still, with the advanced knowledge, management learning and the continual growth of the PC's micro-processing power, we must all expect advances to continue to come fast and furious. However, we must be mindful of the bad actors taking advantage of the situation and meet them head-on with our counter-offensives.

The publishing industry must now embrace AI and provide the necessary investment to build the most robust, innovative, thought-provoking AI tools.

Back in the 1980s, Telerate provided financial information for the fixed-income and foreign exchange markets and had secured 100% of that information market. Bloomberg launched in 1985 to try to compete with Telerate. By 1998, Bloomberg had actually overtaken Telerate, in scale, and Telerate was out of business just a few years later.

The moral of this story is that if any publisher does not invest and innovate with AI, it could be the next Telerate. AI is the future for all industries – and especially the scholarly publishing industry. **Ri**

**Darrell Gunter is CEO of Gunter Media Group, and the author of *Transforming Scholarly Research with Blockchain Technologies and AI*.**



# Introducing Pledge to Open: Taylor & Francis' innovative open access books pilot

A collaborative funding, open access books initiative  
[librarianresources.taylorandfrancis.com/pledge-to-open-pilot](http://librarianresources.taylorandfrancis.com/pledge-to-open-pilot)



Taylor & Francis is delighted to announce the launch of 'Pledge to Open', a new collaborative funding, open access books initiative, in conjunction with Jisc and other international member partners, to ensure the widest possible dissemination and impact of our research book titles. The Pledge to Open pilot aims to transform 70 front-list research book titles into open access, while encouraging bibliodiversity, the long-term vitality of monograph publishing, and an equitable and sustainable OA book publishing ecosystem.

Taylor & Francis' driving mission is to foster human progress through knowledge, and this pilot is centred around seven key issue-based collections, drawing on the interdisciplinary strengths within both humanities and social sciences, and STEM, of the Routledge and CRC Press imprints.

**'Pledge to Open is designed to ensure that open access book content is free to read for all and free to publish for the author'**

Providing an alternative to the standard BPC model, as it doesn't ask authors to pay anything towards making their book open access, Pledge to Open invites organisations that share Taylor & Francis' ambition for all researchers to be able to choose open, to pledge their support for open access books on key issues for the future of our societies and our planet. The pilot comprises a broad geographical range of book authors, including those who would not otherwise have access to open access funding, such as those based in lower-income countries, and across the Global South.

In short, each collection will showcase 10 cutting-edge new research titles on a key global issue, drawn from across a broad range of subject areas. The interdisciplinary collections are as follows:

- Green Renewable Energy
- Climate Change
- Pandemic
- Women's Health and Rights
- Wellbeing and Mental Health
- Race and Racism
- Populism and Extremism

Participating institutions can choose which collection or collections they would like to pledge for and pay a one-off fee per collection to support its transformation to open access. In return, they receive perpetual unlimited multi-user access for

the titles of the collections they pledge for, irrespective of any funding thresholds being met for this pilot.

Pledge to Open is designed to ensure that open access book content is free to read for all and free to publish for the author, thereby increasing the reach and impact of the research for a wider international audience. The pilot aims to provide a straightforward first step towards building a sustainable and affordable collective funding model in Taylor & Francis' Open Access Book Publishing Programme. As a pilot scheme, we are keen to hear feedback from all stakeholders as we develop the model and ensure a continued successful move to open for our research book titles, and that open access becomes an option for all authors.

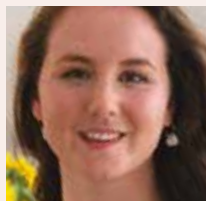
#### How to participate

Pledge to Open is open for support worldwide. Institutions interested in pledging support, please contact [pledgetoopen@tandf.co.uk](mailto:pledgetoopen@tandf.co.uk).

For Jisc members interested in pledging support, please apply via the Jisc License subscriptions manager catalogue.

*James Watson and Maria Angelaki*

CHOOSE open BOOKS



# How should we approach the AI revolution?

Cait Cullen asks: is artificial intelligence a threat to integrity or the herald of new opportunities?

At IOP Publishing's recent international colleague conference, PubCon, the discussion turned to the elephant in the room: artificial intelligence (AI). The use of AI in scholarly publishing creates a host of opportunities but also poses many challenges and integrity issues. As academic publishers, how should we approach the AI revolution?

Chaired by Kim Eggleton, Head of Research Integrity and Peer Review at IOP Publishing, a panel of industry experts included Fabienne Michaud, Product Manager at Crossref; Dustin Smith, co-founder and President of Hum; Dr Matt Hodgson, Associate Lecturer at the University of York; and Lauren Flintoft, Research Integrity Officer at IOP Publishing. The panel expressed a mix of excitement and concern on the use of AI in research and publishing.

To gauge the temperature in the room at the start and end of the session, a poll was carried out, with IOP Publishing colleagues invited to anonymously submit their feelings on AI. Opinions were very mixed, with many feeling sceptical or concerned about the implications of adopting AI in publishing. On a scale of one to 10 – where one is 'terrified' and 10 is 'very excited' – the average initial feeling on the impact of AI in scholarly publishing was 5.25. By the end of the session, polling indicated that guests were left feeling more informed, enthusiastic, and conversational on the topic, with the average score rising to 6.17. But what are the problems and opportunities associated with the use of artificial intelligence tools in academic publishing?

### Opportunities for AI

Introduced by Kim Eggleton as 'Captain Optimism' for his positive view on the use of AI, Dustin Smith said he believes that tools such as large language models (LLMs) can help us to broaden and engage our audience. "AI tools have the potential to streamline our workflows, allowing us more time to focus on outstanding issues such as research integrity. AI tools can help to identify potential topics for special issues and collections, single out areas where we should be commissioning more content,



and analyse lulls and booms in publishing conversations on a global scale," he said.

"When we talk about AI, most people immediately think of ChatGPT. But ChatGPT is a consumer-grade product that was not made for publishing. The real opportunity for publishers are the fine-tuned AI products specifically made for academic and scholarly use. With these products, many major concerns around AI use can be bypassed and there are opportunities to take a step forward with some of the longest standing publishing challenges. For example: we can add restrictions to prompts, asking only for cited content, or give LLMs access to tools (such as simple calculators or sophisticated databases)."

One example of AI opportunity is to generate summaries of papers, explained Smith. "Some publishers are using GPT-4, ChatGPT's more capable successor, to generate 'lay summaries' of academic papers for their magazines. However, these summaries must still be validated by a human professional to ensure accuracy."

Dr Matt Hodgson also believes in the benefits of AI for research and scholarly publishing. He advocates that AI tools can be used to boost the accessibility of science, allowing dissemination of content to a wider audience. He said: "AI should be used as a tool to enhance and support human capabilities, not to replace them. To stay competitive as a researcher or publisher, you must embrace new



technologies, and that has always been the case. With AI, it simply feels a little different owing to its advanced capabilities, which can make us feel somewhat threatened. However, remember that AI itself won't take your job – but someone using it will."

#### What are the threats to scholarly publishing from AI?

The jury is still out on AI in academic publishing, argued Fabienne Michaud: "AI is here to stay, but, when it comes to policies and processes, we are not quite there yet. As an industry, we must combine our efforts to establish a base of ethical guidance and training. Academic publishing is built on a foundation of trust and integrity and, when it comes to

AI, one of the biggest threats is its lack of originality, creativity, and insight. AI writing tools were not built to be correct. Instead, they are designed to provide plausible answers. This is in juxtaposition to the values that form the foundation of scholarly publishing."

Speaking from experience, Lauren Flintoft also expressed some trepidation: "AI tools rely on regurgitated information from other sources that can often be outdated and incorrectly cited. We know that AI tools are sometimes fabricating content and not correctly citing their sources. Instead, they make up seemingly plausible references that don't lead to credible, or even real, academic texts. Without proper monitoring, this

**'AI is here to stay, but, when it comes to policies and processes, we are not quite there yet'**

inaccurate content AI generates, called 'hallucinations,' could pollute the scholarly record with false information. It is not possible for humans to detect every instance of AI generated content, and it is unfair to expect this."

Flintoft also expressed concern about the ethics of using AI as an author: "AI tools don't currently consider permissions required for third-party content they draw upon, nor can they take responsibility for their work; both are actions regularly expected of academic authors. Furthermore, there will likely need to be UK copyright law updates to fully support the use of AI content, and those using them must remain mindful of permissions. Robust frameworks need to be in place in order for AI tools to be ethically used."

#### Where does the responsibility lie for enforcing proper use of AI tools?

Hodgson concluded: "AI will continue to grow, as both a tool and a concern within the industry. Therefore, we need a level of governance to ensure it is used safely, fairly, and responsibly, and that responsibility should not lie solely with publishers. We must encourage more active conversations around the ethics and integrity issues of AI within academia. The most immediate threat is amongst students and early-career researchers who, at this stage, often do not see beyond the excitement."

Despite the varying experiences and outlooks of the panel, by the end of the session one message was clear: AI will play a role in our future, and so we must approach it together with shared responsibility. **Ri**

*Cait Cullen is communications officer at IOP Publishing*



# Spirit, mission and community

*Research Information* met **Mandy Hill**, Managing Director, Academic Publishing, at Cambridge University Press & Assessment, to discuss the wider scholarly communications ecosystem and some of the highlights of her time since joining Cambridge

**Could you outline what you see as university presses' place in the scholarly communications ecosystem?**

One of my favourite quotes comes from a former boss; I've used it many, many times. He said: "Other publishers publish in order to make money. We make money in order to publish."

I've always liked that as a way to summarise how university presses work. We do a lot of things that are very similar to commercial publishers, but at our heart, there's something fundamentally different about our motivations. We are publishers. That's our expertise; that's our background; that's our training – but our spirit, mission and motivation is all about the academic community. When I think about everything that's going on in the communities we serve, one thing I really am keen to develop is for universities to see us as a resource. We are there for them – and not just as an external service.

It strikes me that there are often polarised views in the world of scholarly communications. I'd like to think that sometimes – not always – we can be a voice of pragmatism that says 'yes, we can understand both sides of the equation'. Of course, there are things that need to change radically – but we all need to work together. I try to be positive about things, and I want to believe that we can have a foot in both camps, so to speak, in a constructive and useful way.

**Do you think other players in the industry – librarians, for example – look on university presses in a kinder light than they do commercial publishers?**

Sometimes! I think they do in theory, but in

practice they have their own constraints and needs – and this comes back to how much we have in common with our commercial counterparts. They still need to negotiate with us. They're trying to make their budgets spread as far as they possibly can.

So yes, I believe they do think of us differently, but I wouldn't go as far as 'more kindly', which I think is the word you used. They hold us to a higher standard, and rightly so.

They expect us to have higher quality and not make compromises that others might – but sometimes we are involved in conversations that they might find more difficult with commercial operators. Sometimes, for example, in conversations around the open movement, it feels like publishers are in one place and librarians in a very different place. That feels like something of a wasted opportunity.

**As a well-known university press, could you outline some of Cambridge University Press's specific core aims in terms of mission and ethos?**

Our Cambridge Open Equity Initiative

*'We can be that voice of pragmatism that says yes, we can understand both sides of the equation'*

represents a plan to ensure that 'open' doesn't just mean for readers – it means 'open' for authors as well. Of course, we need to be transparent that there are real costs associated with publishing articles; there is a difference between giving free readership to readers in developing countries and providing free publishing. And, of course, budgets in richer countries remain the same, even if you were to subsidise the publishing of more content from the Global South.

We need to be able to have open conversations to say we believe that all publishing is valuable, and that we are committed to the transition to open. We don't have the levels of profitability to soak up losses; we – and the whole industry – need to do this in a fair, equitable and sustainable way.

One of the advantages we have as a university press is that we don't have to be accountable to shareholders. Clearly, we have to be financially sustainable and there are expectations [from the University of Cambridge] around that, but it's a much easier conversation to have because of the balance we have between mission and money.

**How much contact do you have with the University itself?**

Being a department of the University of Cambridge informs both what we do and how we do it. For example, I meet with colleagues from Cambridge University library every couple of months at least, but sometimes it's every couple of weeks, and a while back it seemed I was meeting them every couple of days. We have a really good relationship.

However, that doesn't mean we're aligned on everything; it means that we're able to go into a room and say, 'right, we've got the same boss, we're coming at it from this perspective, how can we use that to think creatively about what Cambridge needs from us as a joint effort?' And then: 'Okay, if we can do that together, is there any context here for scholarly communications outside of Cambridge?'

**We first met about nine years ago, shortly after you moved to Cambridge. What have been the biggest developments within academic publishing since then?**

Not much has happened really in that time, has it? It's all been a bit quiet!

Seriously, though, Plan S is obviously one of the big developments. Opinions were mixed, but what it did was make us look in the mirror and think: 'What are we going to do to really speed this process up?' It has certainly created more traction in the move to open. I don't believe in everything cOAlition S says and does, and there are lots of things that I would like to have been done in a different way, but the fundamental impetus for change has been really successful.

Of course, we have to mention Covid – which has been horrific in many ways. But if you look at it from a 'non-people' point of view, it has actually had some useful impact such as the ways of hybrid working, and the acceleration around the digital higher education space – there have been some really interesting developments there.

The other big thing that has happened is the proliferation of conversations – and the openness of those conversations – around climate and around equality, diversity, inclusion and belonging (EDIB). These subjects have risen to the fore and are no longer something that might have once been tagged onto the bottom of an agenda.

People are actually now taking accountability and thinking about what, both personally and organisationally, we need to do. That feels like a huge leap forward. Nine years ago, people were certainly aware of equality, diversity, inclusion and belonging (or any version of those words), but the world and industry have moved on. Most of us have really engaged in thinking through what our own position is, and what we want and need to do. And that feels like a massive development.

**What about Cambridge University Press? What have been the highlights for you?**

Recently we held an event to mark the launch of our series of Cambridge Prisms journals – a new series of remarkable interdisciplinary publications that tackle



Mandy Hill

some of the biggest subjects facing humanity. Interdisciplinarity has been something that, for as long as I can remember, journal publishers have talked about. With Prisms, we've actually found a way to make it happen. It was lovely to be reminded how excited I still am by our publishing. It's why we're here.

We continue to have so much amazing publishing going on, and I am surrounded by people who are just brilliant at commissioning, creating, and developing. There was also the Cambridge Elements programme. When I started here, that had been talked about for a while and I saw it being brought to fruition. It's been a fantastic success.

Hitting our target of 50% open access articles last year was a great milestone – we're not just talking about open access anymore, we're doing it. We've come from way behind the pack in terms of open access and we're now right at the front. We're doing the really tough miles on this; we've got the metaphorical machete and we're lopping down the trees in the way, trying to find a path through. Obviously, we are replanting responsibly and not treading on any endangered species as we go!

Joking apart, I feel a real sense of optimism – not just blind optimism about the shift to open access, because there are many challenges ahead of us – but internally at Cambridge and externally there is a real sense that we are going to make this work.

**Finally, what changes would you like to see in the world of scholarly communications over the next few years?**

One of the big concerns I have, if that's the right word, is that stakeholders often continue to be in quite different and distinct camps. Thinking specifically around the shift to open, you've got funders, you've got librarians, you've got publishers, you've got researchers – and, sometimes more often than is helpful, people are throwing things around and saying: 'Well, they need to sort that out before we can sort this out.'

If we're really going to make the big leaps forward, it's not just about flipping to open access or changing a journal from one model to another. We need to really think about the opportunities beyond open access, or digital communications generally, or the impact of the reward and recognition and models on author behaviour – we need to get out of those silos and have really engaged conversations.

If we're going to see the changes that I think most of us want, there will have to be more collaboration across the stakeholder groups. Coming back to where we started in this interview, I think university presses are in an ideal brokering position and can play a full part in those conversations. I am really proud of what we have achieved to date and am looking forward to building on this momentum to support academics to get the most out of the transition to open access. **Ri**

**Interview by Tim Gillett**

# All things must pass



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## Andrew Barker and Elaine Sykes reflect on Lancaster University's shift to an open research culture

We begin this opinion piece with a statement of confidence, ambition and intent: this is the best and most exciting time to be a librarian; universities are progressing towards a new research culture – a culture that puts openness and equity at its centre – and librarians are using our knowledge, skills, relationships and our ambitions to be at the centre of that progressive shift.

That shift includes, but is not limited to, the future of scholarly outputs, data, digital scholarship and citizen science

engagement opportunities. This piece will outline thoughts from Lancaster University on what we are going to do to support the move to an open research culture, but it will also make it clear that the status quo has to change. We are explicit that now is the time to accept that change and for the sector to work together on a range of activities that cut across the different parts of our sector.

### **Beware of darkness**

With the recent conclusion in the UK of two significant journal negotiations (Elsevier in 2022 and Springer Nature in 2023) there has been a palpable sense within universities that despite the successful conclusion of both negotiations – in which the sector was able to successfully advocate for greater concessions – that simply continuing to negotiate as we have done in the past would be to tread water.

Indeed, the celebrations since the conclusion of the Springer Nature

negotiation have been surprisingly muted and downbeat, a sense that we need more and different than this, but an uncertainty as to exactly what 'more' and 'different' translates to.

This has led to a general feeling in every part of the research community that now is an opportune time to review the open access publishing landscape more fundamentally and seek to effect meaningful, beneficial change that removes barriers, improves equity and reduces costs. And that we do not get bogged down in the slight sense of anti-climax we feel, but to use it as a springboard to something new, building on the substantial and progressive work of recent years.

### **Living in the material world – the current open access landscape**

Open access (OA) publishing has been on the rise over the past few decades.



## 'Now is an opportune time to review the open access publishing landscape more fundamentally'

What was once seen as an outlier, an eccentricity of some librarians that simply could not work, has, through the leadership of both funders and REF mandates, helped to drive a change in publications models that has seen more research published and available to all sections of our society.

This is an important development as it has allowed much greater access to research than ever before, including the people who funded much of this research (the public), who were previously excluded from this information by high costs.

In terms of opening up academic research to new audiences and removing barriers to knowledge, this movement has been highly successful and there is more high-quality research available to the public than ever before, all of which is a real positive to where we were quite recently when we paid high subscription costs to sit in a walled garden.

However, we also had ambitions that the open access movement would realign the balance of power between researchers and publishers and reduce the financial amounts that HEIs are spending with large commercial publishers. We have not achieved that yet, far from it. While we understand that publishers exist in a different market to universities – where increasing profit for owners or shareholders is for many (although certainly not all) publishers the whole reason to be in the sector – we also understand acutely that a significant proportion of that profit is derived from the largely voluntary work of academics. Yet open access publication models continue to be expensive and complex to navigate: this must change.

If scholarly publishing is market- or profit-driven, then that market is focused on the much criticised and less tangible 'prestige' factor. This prestige factor is one of the hardest elements to overcome precisely because it is so (possibly usefully) intangible. However, its existence allows so-called 'prestigious' publishers to charge such high amounts – they know that demand will continue to be high because of the 'prestige'.

That said, dissatisfaction with the existing scholarly publishing system is



Elaine Sykes and Andrew Barker

growing among researchers, libraries and other key stakeholders who highlight the high costs, obscure pricing models and unfavourable business practices among their chief dissatisfactions. This dissatisfaction has manifested itself in many ways – ranging from emails from researchers to library staff criticising 'legacy publishers' and sharing their frustration in committee meetings, to an open letter to library directors signed by 100-plus academics expressing their desire to see academia turn away from large commercial publishers as well as several high-profile editorial journal board mass resignations.

Jisc, and other bodies, including SCONUL, RLUK, and the N8 group of library directors have also highlighted the need to consider, and provide leadership on, what comes next after transformational agreements. That is where we are, but we are now beginning to progress identifying new approaches.

### Try some, buy some

Although as a sector we continue to consider what comes next, we at Lancaster are focused on a variety of new initiatives to redress the current model, and to bring leadership and innovation to the landscape. This goes from alternative publishers, including university presses, to scholarly societies and not-for-profit publishers.

At Lancaster, we are also dipping our toes into a variety of new publishing models – which go beyond just journal publishing, and include our involvement as a named partner on a Lancaster University-led, multimillion-pound research project, the Open Book Collective, looking at

establishing an alternative funding model and infrastructure for open access books.

Beyond this, we will continue to experiment and find new models to work with and invest in. To that end, we have reimagined how we invest our money, creating a new content and scholarship vision and budget to enable us to move more of our funding directly into open access opportunities away from legacy models of publishing.

### Got my mind set on you

So where is the sector going, what does the future look like and what role will libraries play in it?

Libraries have established a very different role within our institutions over the past 10 years, using our old skills to develop new opportunities taking us from simple service providers to established partners in the shifting research culture. We are working with academics, publishers, the public and other stakeholders to build on our skills relating to data, our ability to connect all parts of the scholarly communication and our determination and ability to get things done.

As we stated at the start of this piece, this is the most exciting time to be a librarian and to work in libraries. We want to bring positive change to the sector that goes beyond simple procurement, and by working in partnership with those willing to work with us to enhance research culture within and without our institutions, we will bring that change. **Ri**

*Andrew Barker is Library Director, Lancaster University; Elaine Sykes is Acting Associate Director: Content and Open Research, Lancaster University*

# Up for a challenge?

**Stephanie Dawson argues the case for organisations to upgrade to open science**

Open science can seem daunting to academic publishers who may feel like the goal posts are moving just as they embrace open access.

As a broad umbrella term that can include a range of practices from open notebooks, methods and data to open-source programming and citizen science, it may also seem that open science focuses more on how researchers conduct their studies before the results are ever written up for publication. The aims reach far beyond the academic journal. But these broad goals offer a wealth of opportunities for publishers to participate in and profit from the move towards open science.

The 2021 definition of open science from UNESCO<sup>1</sup> describes “practices aiming to make multilingual scientific knowledge openly available, accessible and reusable for everyone, to increase scientific collaborations and sharing of information for the benefits of science and society, and to open the processes of scientific knowledge creation, evaluation and communication to societal actors beyond the traditional scientific community”. Because open science can be broadly defined and implemented, it is essential to understand what aspects are most immediately relevant to the publishing community and beyond and to outline a strategy for the practices that will increase engagement and encourage participation.

## Digital first

Open science is digital. Its practices exploit the full range of digital knowledge creation and dissemination. If open access can be basically fulfilled by making an article PDF freely accessible for readers on a webpage, open science requires machine-readable licences, persistent identifiers and rich metadata for fully interoperable digital systems.

Open access is a prerequisite, but also only a first step. In order to participate in a

digital network of knowledge, a range of further persistent identifiers, controlled vocabulary and shared tagging make research outputs – from data sets to preprints and published articles – more accessible to computers for analysis and participation in the aggregation of scientific research in a networked knowledge base. By building on shared knowledge, the research and publishing community can work to create markers of trust for the public and systems that encourage participation beyond the academy.

Rich, interoperable metadata should be the first goal for publishers upgrading to open science. By using controlled vocabularies and persistent identifiers, academic research outputs can more fully participate in and support the goals of open science. Digital object identifiers (DOIs) are unique, actionable, interoperable persistent identifiers (PIDs) that enable stable sharing of information and should be applied to every publication. Crossref’s XML schema for the metadata associated with DOIs further make it possible to establish the relationships between published articles and early versions shared online as preprints, pre- or post-publication open reviews, translations or retractions.

Open data sets should be cited with their own DataCite DOIs, rather than shared as unstructured supplemental materials in a PDF. Authorship verified via ORCID helps to facilitate transparent and reliable links between researchers, their contributions, and their affiliations. The CRediT taxonomy provides standardised vocabulary for contributor roles. Affiliations can be more powerfully aggregated to answer questions about institutional-level outputs and usage with the new ROR persistent identifiers. Controlled vocabulary for research funders through the Funder Registry on Crossref provides a similar function. Research



resource identifiers (RRIDs) for resources such as antibodies, cell lines, etc. increase the reproducibility of published research. Finally, unified common open access licences via Creative Commons allow computers to differentiate between research available for data mining or open to build upon. And this is just a selection of the most popular PIDs available!

### Unfolding impact

The more research outputs apply a shared controlled vocabulary via persistent identifiers, the more deeply they can unfold their impact within an interoperable network of knowledge. They are open not only to individual readers, but, due to unambiguously defined relations, they are also more sustainably connected to the larger network of knowledge. This opens up new possibilities for interoperability and is the foundation upon which open science is built.

With that long list of PIDs it may seem like a lot of extra work for publishers, but embracing open science comes with some important rewards. Upgrading to open science brings better discoverability in a whole range of big data systems. At ScienceOpen over the past 10 years we have built a discovery environment and citation index with now more than 87 million records for articles, books, chapters and conference proceedings based on openly accessible data.

Our database depends on DOIs, structured XML and open citations. It interfaces with a number of other systems and products such as SciELO, ORCID, Altmetric, Scite.ai, SciScore and Reviewer Credits that similarly use DOIs as the main reference point. We see more usage of content with machine-readable open access licenses, with open abstracts and structured citation data, with affiliations and keywords. And ScienceOpen is not the only open discovery tool drawing on this data – Google Scholar, Dimensions, the Lens, Semantic Scholar and others offer the general public access to powerful discovery tools that were formerly restricted to academics working in university libraries. Better discoverability leads to more usage, a central currency in the academic information economy.

Increased usage as a reward for open practices should be visible for publishers, authors and readers. Support of alternative metrics is a core practice under the open science umbrella and is particularly highlighted in the EU open science strategy<sup>2</sup>. Spearheaded by open access publishers more than a decade ago to demonstrate the value of paying an APC

for open publishing, article-level metrics have become a new standard within the researcher community. Authors expect to see the number of citations to their article, download numbers or online attention. An interoperable digital landscape of open science publishing makes it possible to track usage and impact at an ever more granular level. A key development in the last years was opening up citation data. Through the advocacy of the Initiative of Open Citations as of 2022 now 100% of references deposited at Crossref are treated as open metadata.

### Open science and HSS

Do you feel, nevertheless, like open “science” is not for you as a book publisher in the humanities and social sciences? Wrong! While the use of Crossref DOIs as persistent identifiers for journal articles has become the industry standard, it is still relatively new territory for books and chapters. The metadata registered with most book DOIs is also significantly less rich, usually lacking abstracts and citations, thus providing less text and fewer nodes of connectivity for search engines to work with. This can result in lower discoverability for the main output types – books and chapters – of the humanities and social sciences. ScienceOpen began indexing books and chapters in 2019 and now has more than two million records with validated DOIs.

A quick search for books, however, immediately highlights how slim most of the book metadata available through Crossref is. To help smaller publishers enrich their book metadata, ScienceOpen created the free platform BookMetaHub, funded by the German Ministry of Education and Research, that can translate metadata from the XML format used for booksellers and libraries, ONIX, into a Crossref-ready format. This richer metadata can help book publishers to benefit from the advantages in discoverability.

Another way to upgrade to open science is to explore open and transparent peer review. Just by committing to accept manuscripts that have been posted online as a preprint, publishers can support the research community. Add this information to your journal pages and instructions or write a blog to get the word out: researchers are still sometimes unsure what counts as “previously published”.

In a next step you could agree to consider open peer reviews of preprints as part of your peer review process or to allow your reviewers to sign or post their review reports. ASAPbio offers a wealth



Stephanie Dawson

of resources for authors and journals around preprint review. And if you decide to choose a fully open or transparent peer review model for your next journal, make sure to give reviews a DOI in the Crossref peer review XML schema to make them citable and discoverable in their own right.

There are an increasing number of journals and publishers embracing some form of open review including BioMedCentral, EMBO, Copernicus, eLife, JMIR, F1000 Research, and ScienceOpen. Ross-Hellauer and Görögh (2019)<sup>3</sup> provide some thoughtful guidance for getting started.

Finally, one of the main goals of open science is to engage the general public and raise levels of trust in science and academia. Projects range from citizen science participation to plain-language lay summaries and multilingual publishing.

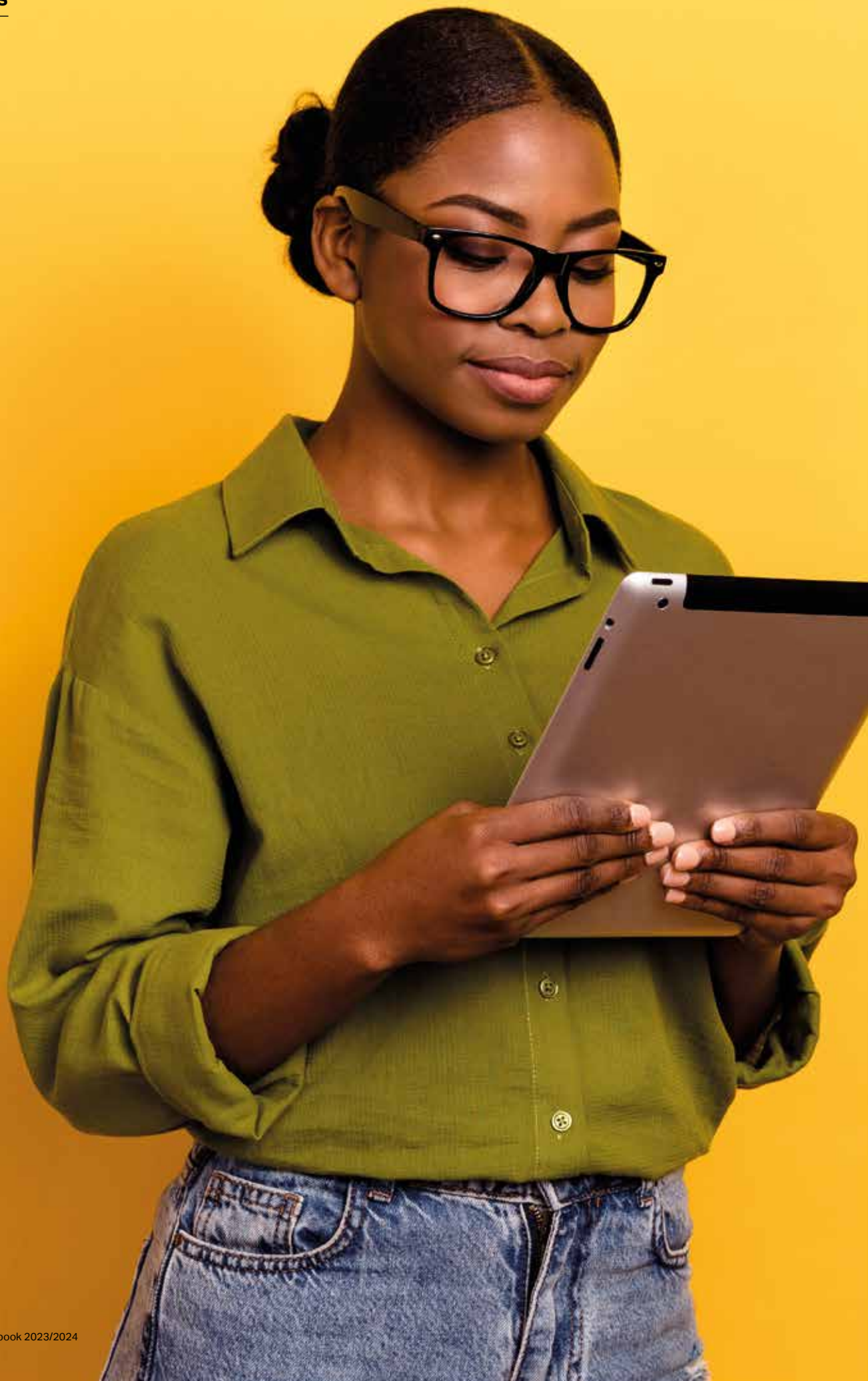
Academic publishers are already engaging with open science and driving it forward. But there is more work to be done before a seamless flow of information connects researchers “for the benefits of science and society” and speeds up the pace of innovation to address some of the big challenges that lay before us. **Ri**

### Stephanie Dawson is CEO at ScienceOpen.

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The rapid adoption of ebooks in recent years has led to greater scrutiny of pricing models, writes David Stuart

# Searching for the right ebook business models

For a long time, the adoption of ebooks by libraries lagged behind the adoption of ejournals, but the Covid-19 pandemic brought a seismic change.

According to Jack Macdonald, Director of Library Sales at Cambridge University Press, it accelerated many of the trends that were already there, as librarians tried to ensure all the assigned readings and textbooks were available electronically: "That's not a new trend, but because of the pandemic, everything flipped to remote, more or less overnight, and that just made that a bigger issue."

This switch to ebooks has also been accompanied by a lot of changes in the market, says Macdonald: "The other trend in the past couple of years is the amount of experimentation and a lot of momentum behind trying to find business models for open access monographs in particular."

Some of these changes have not always been welcomed by the library community, especially when it has resulted in higher book prices. In September 2020, a group of academic librarians and researchers wrote an open letter to the UK Government asking it to investigate ebook pricing and licensing practices in the scholarly publishing sector.

As Ben Ashcroft, Vice President (Commercial) at De Gruyter, explains: "Book budgets, whether print or

**"This switch to ebooks has also been accompanied by a lot of changes in the market"**

## 'As new models appear, others will inevitably disappear in the creative destruction of the market place'

→ electronic, are under pressure for the majority of institutions because of the need to continue to finance increasing subscription costs for journals. Everything we talk about, in terms of ebook development, has to be seen through that lens as well. It has an important influence on the models that are chosen and acquisition policies."

The challenge for publishers is to find those models that are acceptable to everyone, providing seamless access to the users at a cost the institutions can afford and that reflects the value of the work in a sustainable manner.

### **A complex ebook ecosystem**

Finding a solution to this challenge has led to an increasingly complex ebook ecosystem, as anyone with experience of the ebook market will attest. It is a marketplace that can be increasingly difficult to navigate and with a wide range of models and accompanying metrics.

For Ashcroft, a number of trends add to this complexity: "The fact that you can so easily track usage and demand for ebooks, and also budgetary pressures, has meant there's been a shift towards demand-driven acquisition, evidence-based acquisition and all those other usage-driven models as well. There's been a huge proliferation in the number of platforms as well... third-party offers by aggregators, traditional large resellers, and publishers who develop their own platforms and ebook offerings."

He says this means managing the business of acquisition, cataloguing and all the other library processes has become more challenging: "Librarians try to navigate the different offers and the different models and the different pricing, and then educate users about where they can access content. The complexity of the whole landscape has become mind-boggling. We're probably not doing ourselves a favour as an industry by making it so complex for users to navigate, because ultimately your researcher or student just wants to get quickly to the information they need to use and then move on and do their jobs."



### **Continuing innovation**

While models such as evidence-based acquisition and front-list ordering were unusual 10 years ago, they are now prevalent, says Macdonald. New models and schemes are being explored all the time, particularly in the area of open access, he adds. One example is CUP's Flip It Open, which aims to fund open access publication through typical purchasing habits. Once a certain revenue threshold has been reached, the book becomes available as open access and as an affordable paperback.

As Macdonald points out, however, innovative models are not just about open access: "Open access is an interesting market trend, and is driving a lot of activity, but something with even bigger implications is textbooks. If you ask libraries, what's the biggest pain point for them? Is it open access ebooks or textbooks? I'm sure that nine out of 10 would say textbooks. That's not to

diminish the kind of exciting possibilities of open access monographs, but textbooks is probably a more immediate market issue.

"We launched a successful true library model for e-textbooks in 2020, called the Cambridge Higher Education website. It's not based on one-to-one pricing for students, it's based on flat fees for the institution, with unlimited access. What's really exciting about that is that we sell quite often in collections, so an institution will have access to a collection of textbooks, which means that as new books are published, as new editions are published, institutions have access to those as they come. It's an example of where it's moving away from a print mindset on ebooks, and getting a real benefit from having an ebook."

As new models appear, others will inevitably disappear in the creative destruction of the market place, and as parts of the market reach saturation point.





Roman Samborskyi/Shutterstock.com

"The models can lead to us eroding the value of the content, and that's a very slippery slope; we're creating a problem for ourselves in the future. It's obviously potentially good for authors, publishers and users to have content more easily discoverable out there, and those models do provide that, but they do raise the issue of how to ensure that content is remunerated equitably and that publishers' books programmes in the end are actually sustainable.

"If you put lots of content out there for free and are not actually earning money with it, particularly for monographs and low usage titles, that can become a real issue. We and other publishers are looking at how we participate in those models, what sort of pricing we should be expecting for that, whether we restrict content out of usage-based models, just to make sure that the whole ecosystem remains financially sustainable for us.

"Evidence-based acquisition, for example, does have a role to play in the market longer term. It is an exciting way of making backlist titles available to libraries that are at a sustainable cost, and ensuring that they have a sustainable way of purchasing them, but we are having to look a way of doing this for the front list that are more financially sustainable."

#### More than a 'book'

Part of the problem is that ebook models have been tied to the traditional concept of the book for too long, which has failed to recognise the potential added value of both ebooks and textbooks.

As Ashcroft puts it: "We've always had a policy of pricing our ebooks for institutional use at the same price as our print books. So, a PDF licence to an institution for use by everybody with no limits to usage or downloads, simultaneous usage, has always cost the same as a print book. We asked ourselves whether that was actually the right approach and came to the conclusion that an electronic format made available in that way does actually deliver an additional value versus the print book, so for our own books we have decoupled the ebook prices from the print prices and ebook prices for institutions have increased as a result, just to reflect the additional value that they represent to an institution."

Macdonald also emphasises the difference between the book and the ebook, particularly where textbooks are concerned. He believes that once the two are separated, then there is greater scope for innovation: "I don't think the market has fully moved on from a print mindset when it comes to ebooks. The

market has embraced ebooks without doubt, but there's too much of it that clings on to the world of print. You still see quite a lot of ebooks for libraries sold on limited concurrency, where you're trying to recreate the print world. Pricing is still based on print in most cases, and that's still based on a time when publishers' main source of business was print, and ebooks were an extra add-on. But that's really flipped around now. It's not really suitable, and it completely undervalues the ebook. Eventually ebook pricing in the market will diverge from print. It's a matter of time, it will get there, but that divergence will have to happen.

"For example, one way of seeing the print mindset carry over into ebooks is edition cycling. A library might have access to the fourth edition of

**'Eventually, sustainable and equitable models will emerge that everyone can live with'**

a textbook but no access to the fifth edition of textbook. What a divergence from the print world means is that the institution should have access to a dynamic resource that keeps getting updated. We've got a successful textbook programme, but we are launching a courseware programme as well, which will have that kind of dynamic, adaptive electronic resource element to it."

#### Conclusion

Despite the growth in interest in ebooks in recent years, there is still a lot of work to be done if ebook models are to be found that are acceptable to everyone.

The size of the gap can be seen in the language we use. Whereas distinguishing between journals and e-journals now seems a relic of a bygone age, for books and ebooks it still seems a necessary distinction. But maybe that's not such a bad thing; books and ebooks may be fundamentally different and recognising that difference is an important part of enabling innovations to flourish.

The good news is that as publishers keep trying new innovations, and libraries increasingly prioritise their electronic holdings, eventually sustainable and equitable models will emerge that everyone can live with. **Ri**

Ashcroft notes: "The market at some point will reach saturation point for the big sort of backlist or archive deal, and we will see usage-based models come more under pressure. Short term loans and demand-driven acquisition are probably not going to be around long-term because they don't represent viable sustainable models for publishers. Evidence-based acquisition is probably something that is going to be around more long-term, but with changes to ensure that the content that is made available, effectively for free, is limited in some way."

#### Recognising value

As well as finding models that provide access, it is also important that they should reflect the value of the work.

While demand-driven acquisition and short-term loans have enabled a lot of access to content with no upfront fees, for Ashcroft they risk creating the wrong expectations about the content:

# Raising the platform

**Publishing platforms are digital solutions that are principally designed to help publishers and authors to evaluate and disseminate content**

In its simplest form, a publishing platform is an accessible location to host content and make it discoverable. Publishing platforms allow authors to share their insights on a digital platform, and promote the sharing of information with their intended audiences.

A publishing platform needs to give publishers control of all the key functions that they require to run their publication and drive growth, as well as how their content is hosted,

presented, marketed, and shared. It needs to support all of a publishers' content, products and websites, and be easy to customise, extend and link to third-party systems.

An effective publishing platform increases the value of a publisher's content and the impact of their digital brand with websites that adapt the features we are familiar with in many successful consumer websites specifically for research content.

Publishing platforms have

traditionally been used either for disseminating published content to readers, or to carry out the submission and peer review process. In recent years, platforms have been extended to cater for all other stages of the publishing process including authoring, copy editing, typesetting and proof checking.

These platforms are more complex because they have to deal with the full content of a submission, including modifications,

acceptance and rejection of those modifications, and comprehensive track changes. New platforms include proof checking systems that allow authors to check their proofs online and in a browser, rather than on downloaded PDFs.

Publishing platforms are always in development. Many platforms have become more open, both through open-source technologies and new features or content that does not live behind a paywall. Platforms have become more





central to publishers' product development strategies, and there has been consolidation in the delivery of digital content.

Seamless access and discovery have always been key, but some exciting advances in the use of AI for relatedness, for example, has driven innovation. Publishers have also made some strides around accessibility, and have been willing to collaborate across the industry to make this happen more quickly.

### Key players

Publishing platform providers include **67 Bricks**, a trusted partner to many publishers. The company has created flagship information products, platforms, AI-powered workflow tools and supercharged digital user experiences.

**Adam Matthew Digital** is a specialist publisher of primary-source collections. The company developed the Quartex digital collections platform, a fully hosted solution with functionality that requires no technical expertise, and which allows customers the flexibility to establish customised workflows based on their unique needs and collections.

**Atypion** is the creator of the Literatum online publishing and website development platform. The platform was engineered with a modular structure, so that it can easily be adapted to each publisher's business objectives.

**CAB Direct** is an online platform that was built specifically to help users get the most out of CAB's world-class bibliographic databases, CAB Abstracts and Global Health, and more than 30 online database subsets.

**F1000Research** is an open-research platform, offering rapid publication of research articles and other research outputs. Articles can be

## 'An effective publishing platform increases the value of a publisher's content'

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firm leverages software tools for a rigorous, fast and efficient service.

**Pensoft** is the creator of the ARPHA open-access publishing platform. Offered as software-as-a-service (SaaS), ARPHA allows users to build their own publishing solution, and to manage and host journals, books, conference abstracts, proceedings and institutional documents.

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**Technologies (RVT)** built an XML-based publishing solution from submission to peer review, to production and to final hosting, giving full control to publishers, with full transparency of data.

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**Springer Nature's** platforms are designed to deliver fast, accurate access to the depth and breadth of its online collection of science, technology, medicine, humanities and social sciences journals, ebooks, reference works and databases.

This is not an exhaustive list. If you provide publishing platforms and would like your company to be included, please let us know. **Ri**





## For African research to thrive, Africans must be in charge

Lack of local investment limits the scope of research to whatever international actors decide, disenfranchising Africans, writes Ed Gerstner



The 25th of May celebrates Africa Day, the day on which the Organisation of African Unity, the body that became the African Union, was founded.

Every two years, the University of Pretoria, in partnership with the South African Department of Science and Innovation and the National Research Foundation, marks the occasion with Africa Week, bringing together prominent African and global scientific networks and international, transdisciplinary initiatives.

This year, Springer Nature also launched the Springer Nature African Research Advisory Council (ARAC) – which, like the similar groups of research leaders SN has convened from the US, Japan, and Europe, seeks to provide a platform to discuss the most pressing priorities of researchers in Africa and explore ways in which we might work together to achieve those priorities. Unsurprisingly, the overriding theme that emerged from both discussions was the need for greater African autonomy and empowerment – with a loud call that the development of effective solutions to the challenges facing African communities needs to be driven by those who live and work in those communities.

### Investment is key

Part of the problem is the lack of local investment in research. It limits the scope of research to whatever international actors decide, disenfranchising Africans from determining their own destiny, and limiting research capacity.

Dhesigen Naidoo, Climate Adaptation Lead to the South African Presidential Climate Commission and Senior Research Associate at the ISS Africa, noted that there is a standing resolution in the African Union that every African country will, at some point, invest 1% of GDP in research and development and that South Africa has an official position of 1.5%. With few exceptions, R&D investment is less than half a percent of GDP, and falling. Naidoo said that a big part of the reason for this is national debt and that the requirements imposed by institutions such as the IMF and the World Bank to manage that debt risk repeating mistakes of the past that undermined the development of high-quality universities throughout Africa.

This is where he feels those who advocate for science need to get more involved because even though structural adjustment isn't research, research cannot happen unless a country is able to fund it. The journal *Nature* agrees.

All of this contributes to and is made worse by the fact that most collaborations by researchers at African institutions are with researchers at non-African institutions. Publications from collaborations between institutions in Africa are dwarfed by those from international collaborations. This leads to a fragmentation of effort in areas such as research into mitigating the effects of climate change, research that should be common to institutions across the continent. And it leads to the situation that eight of the



Yusuf/Shutterstock.com

top 10 locations for institutes receiving the most funding for African climate research are the US, UK, Germany, Sweden, France, Netherlands, Norway and Italy, with Kenya and South Africa in ninth and 10th place respectively.

Even so, when African researchers make a substantial contribution to international research efforts, as they did to the Sixth Assessment Report of the United Nations Intergovernmental Panel on Climate Change, it makes a difference. Naidoo said this greater representation was well received across the continent, particularly by policymakers, including the Committee of African Heads of State and Government on Climate Change.

### Better networking, better training

Another factor that restricts African contributions to research is a widespread belief

that the publishing system is rigged against them.

Ernest Aryeetey, Secretary General of the African Research Universities Alliance, recalled the time when he was an editor and found that when African scholars were asked to revise their manuscripts before resubmission, the overwhelming majority never came back. It seemed that most regarded the requirement for revision as a tacit rejection, and so instead would submit their manuscript to a different, lower-impact, journal.

Aly Mbaye, Vice-Chancellor of University Cheikh Anta Diop, Senegal, echoed this and suggests that one way to address it would be to help young African researchers build more effective networks with more experienced researchers within Africa and beyond: a need that resonated with the rest of the ARAC group.

Training is another area that needs attention. Atridrah

Mulonga, Programme Officer at the National Science and Technology Council of Zambia, said it had a lot of success in training young researchers in grant writing. But she said less attention had been given to what happens at the end of the process – at the point of producing a research paper. On this point, I think there's an opportunity here for publishers to do more, such as Springer Nature's Masterclass Online platform, which has measures in place to support low and lower middle-income countries.

Mulonga also raised the concern that if we focus only on creating opportunities and support for early career researchers, where do those researchers go later in their careers? This particularly affects those who've spent time overseas and want to come back.

#### Language of inclusion

The issue of inclusion and the need to do more to recognise and support indigenous knowledge was another topic raised by the Council and at Africa Week. Priscilla Kolibea Mante, Co-chair of the Global Young Academy, pointed out that the diversity of languages across the continent doesn't help.

One thing that might help is the Masakhane initiative, a grassroots network of Africans that is using Natural Language Processing and AI to preserve African languages. This initiative has fired up the young burgeoning grassroots tech community across Africa. In contrast to the difficulties mentioned above in forging intra-African collaborations, this initiative has seemingly cut right through all of this.

**'Part of the problem is the lack of local investment in research'**

#### From challenges to solutions

Although the challenges that African researchers face were where most conversations began, the week was all about seeking solutions, with those who are at the heart of it. There are a number of local initiatives that are already emerging that deserve wider engagement globally.

One is the Science Granting Councils Initiative, which is a collaboration among science funders in Africa (and beyond) to support collaboration among African nations that issues explicit calls for proposals for inter-African research collaborations to do joint research. Another is the Africa-Europe Clusters of Research Excellence programme, a partnership between the African Research Universities Alliance and The Guild of European Research-Intensive Universities which has led to the establishment of 17 joint clusters co-led by universities from each continent and with equity as a precondition for producing outstanding research with maximum societal impact.

And in Windhoek, Namibia on 5 July, the Perivoli African Research Centre of the University of Bristol launched its Charter Initiative for transformative research collaborations with Africa, which seeks to establish an agreed set of principles to redress unequal power dynamics that can arise in collaborations between African institutions and those in the Global North. Publishers can make a substantive difference in this area through policies, backed up by actions, that make it clear that practices such as "helicopter research" and "ethics dumping" are unacceptable.

While there is a long way to go and global collaboration, exploration and support are needed, there is a driving sense of optimism that the right people to drive this change are increasingly being able to take up the reins. **Ri**

*Ed Gerstner is Director of Research Environment Alliances at Springer Nature*

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## Supporting open science in the Arab world

Emily Choynowski outlines the progress of the open research movement in the Middle East and North Africa



The Arab region comprises 22 member states across the Gulf, North Africa, and Sub-Saharan Africa. Although economic circumstances and available human, physical and digital capacities vary widely across these 22 states, the region as a whole has the resources and capability to play a pivotal role in the global transition towards more accessible, sustainable and inclusive research and education models.

However, while many institutions and organisations are at the forefront of this change (for example the King Abdullah University of Science and Technology and King AbdulAziz University in Saudi Arabia, the Qatar National Library and the Egyptian Knowledge Bank), there is a clear need for something more focused on the specific needs of research communities and research institutions just starting out on their journey towards openness.

That is why, at the start of 2022, the Knowledge E Foundation (a registered community interest company based in the UK) decided to develop and launch a new non-profit initiative, the Forum for Open Research in MENA (FORM) – to support the development and implementation of open science policies and practices in research communities and research institutions across the Arab region.

### Overcoming resistance

FORM is my baby and my brainchild. At the time of its inception, I was working as Head of Publishing for Knowledge E (a higher education capacity-building company headquartered in Dubai, working with governments, funders and research institutions across the region). As a diamond open access publisher, I came across a significant – though perhaps not wholly surprising – level of resistance to open access among many researchers across the region, many of whom view

**‘The Arab states currently lack localised resources and guidelines relating to key aspects of open science policies’**

it as synonymous with either predatory practices or low-quality content. This issue was compounded by a more endemic misunderstanding of the nature of open access and the broader concept of open science within the wider scholarly and scientific communities.

These issues arise, in part, because unlike other regions (most notably the European Union) which have a wealth of practical resources, well-established communities of practice and supportive funders, the Arab states currently lack localised resources and guidelines relating to key aspects of open science policies and practices. Moreover, the ability to develop and disseminate supporting resources is hampered by the fact that there is currently no complete and regionally accepted glossary of Arabic open science terms. For example, I have attended conferences where ‘open access’ was translated into six different terms in the same panel, each version with a slightly different meaning. And without an effective lexicon of localised terms (and localised resources), it is impossible to adequately explain and promote open science concepts – which contributes to the misunderstanding and even, occasionally, mistrust of open science and its associated precepts and activities.

### Building collaborative community partnerships

This, then, was the source of inspiration for launching FORM as an independent project funded and founded by the Knowledge E Foundation. Our mission is to support the advancement of open science practices in research institutions and research communities across the Arab region by facilitating the exchange of actionable insights and the development of practical policies.

We seek to do this by: (1) building collaborative community partnerships and encouraging cooperation between members and partners of FORM; (2) by developing accessible and localised resources relating to the implementation of open science policies and practices among our key stakeholder groups; and (3) by championing the development of right-to-left infrastructure functionality in key digital solutions to ensure usability by Arabic speakers. Our membership is institutional, and our goal is to form an international alliance of higher education institutions, research libraries and other research communities based within the Arab region, alongside supportive knowledge partners from across the world.

We are still a very young initiative, with a network of just over 1,800 individuals from 74 countries. The Arab states currently represent 61% of our network. However, we are also seeing strong growth in awareness of, and interest in, our activities in African nations who are not member states of the Arab League. Asia and Europe account for a further 12% and 11% respectively – demonstrating the value of our activities for a diverse array of research communities and institutions beyond our core stakeholder group.

These activities include a pragmatic programme of community development





### The Annual Forum for Open Research will be held at the Rotana Resort, Al Saadiyat Island, Abu Dhabi

activities – free online workshops and webinars designed to help our stakeholders in their transition towards more 'open' policies and practises. We have held six of these monthly events so far, collaborating with partners including the International Science Council, the Directory of Open Access Journals, and cOAlition S.

With a focus on practical insights, these events have proved hugely successful – not only providing valuable learning experiences to key stakeholder groups, but also encouraging the development of a friendly and supportive community of open science advocates within the region. In addition to the community development activities, we have also formed a pan-regional working group to develop a robust Arabic open science glossary, which will be freely available on our website and used to support our own resource creation. We are also launching a bilingual open access journal, focusing on the role, implementation and impact of open science policies and practices in higher education and research institutions across the Arab region.

#### Annual Forum for Open Research

Of course, these activities are predominantly focused on building grassroots support for open science within local research communities. But to ensure real, lasting change a more holistic approach is needed – combining grassroots advocacy with national and regional policymaking. This, then, is our key focus for the remainder of 2023 and we are hugely honoured to have the support and endorsement of UNESCO in this endeavour. Working closely with UNESCO, our goal is to expand the remit of the FORM initiative, to enable it to spearhead the development of open science policies at the governmental level across the region.

This is one of the key outcomes we hope to achieve during this year's Annual Forum for Open Research. Held in a different Arab country each year, it allows librarians, researchers, funders and policymakers from across the region to exchange ideas and discuss the challenges they face and solutions they have developed relating to the implementation of open science policies and practices, and the building of open science communities. This year, it will be held in Abu Dhabi, UAE (22-

25 October), in partnership with UNESCO, Khalifa University, and the UAE Ministry of Education. In addition to the usual series of presentations and workshops, we are gathering senior policymakers from across the region to engage in a full day of policymaking discussions and round tables, as well as a high-level strategy session to establish key regional priorities and formulate an action plan to address them.

Of course, the transition towards more accessible, inclusive and sustainable research ecosystems takes time and requires deep-seated sociocultural adjustments at every stakeholder level. But we believe that FORM will facilitate this process for the Arab region by promoting understanding, developing supportive policies and building an inclusive collaborative community. I hope readers of this article will consider joining us at this year's Annual Forum, either in person or online, as we work together towards a more open Arab region and a more knowledgeable world. [Ri](#)

**Emily Choynowski is Head of Research Development and Dissemination at Knowledge E.**



## Caribbean regional publishing: value, access and inclusivity

Nadine D. Buckland examines the value of university presses in the Caribbean and how they can be used to advance the research agenda of the region



One of only two regional universities in the world, The University of the West Indies is the only Caribbean university to make the *Times Higher Education* World University Ranking lists.

Like any reputable university, it is the parent institution of the scholarly communication arm of most university presses. The University of the West Indies Press (UWIP) serves all five UWI's landed and open campuses. This year, The University of the West Indies will celebrate 75 years of advancing research and education in the region. The University of the West Indies Press marked its 30th year in October 2022.

The value of a university press in the Caribbean can be counted in many ways. Several publishing units within the university had been producing books, periodicals, conference proceedings and the like before the establishment of the university press. UWIP has an indelible footprint through a global network spanning more than 150 countries, delivering value to faculty and scholars through watchful editorial and production processes recognised by regional and international awards.

UWIP conveys its rich heritage of academic excellence enhanced by its brand and reputation. University presses celebrate the achievements of authors and scholars with launches, book signings and other public relations services that recognise the institution as an employer of choice. Investment in university presses reaps great social, cultural and economic benefits on a national level, promoting development and wellbeing. More importantly, university presses provide access to high-quality peer-reviewed content, balancing regional focus and the global imperative in formats that advance the inclusive mandate.

### Access

Recently, I got a request for the right to use a 1949 book cover for a digital collection. It was a publication of The UWI, but not of UWIP, as our content dates back only to 1992. Content previously published by the university is catalogued with its library by campus/country. By this, I mean that each

landed campus has a central library and shared digital library, UWIinC. Research communities perceive that all content produced by the University of the West Indies is in one place, as it should be, but it's not. Here lies an exciting opportunity to fund a project in the making, as many university presses invest in direct-to-consumer strategies.

The issue of external access is as essential as providing internal access to faculty, students and researchers. What do I mean by that? External access is the provision of access to a diverse and rich collection of research and content to a global audience of researchers, funders and publishers. Historically, various entities within the university have provided aggregators, such as EBSCO, JSTOR, Project Muse, Science Open and others, access through their aggregation services. But is there a more unified and accessible way to provide this content from the Caribbean? It should be through the University of the West Indies Press, a global platform from the Caribbean to the world.

### Accessibility

If you search the web for accessibility in the Caribbean, you are likely to see links about providing wheelchair access to various places. This may be the starting point for implementing accessibility features in physical spaces. Notwithstanding this imperative, the primary strategy should be accessibility in education. The old proverb says: 'If you give a man a fish, you feed him for a day. If you teach a man to fish, you feed him for a lifetime.' This quote is appropriate here. But the best way to support children and adults with disability is through education.

Unicef, in partnership with BookFusion, has developed accessible digital textbooks aimed at developing educational content using universal design principles that will allow students who are visually or hearing impaired and those with intellectual, developmental or learning disabilities to read and learn. The initial initiative successfully produced two prototypes. These have been expanded to eight primary-level books and with the capacity to expand from primary to secondary books. Eventually, visually

impaired students will be able to read any ebook in EPUB from those publishers. Additional accessibility functionality will be released in 2023, allowing publishers such as UWIP to offer accessible ebook content across its 16 academic disciplines.

The University of the West Indies is also the home of the Centre for Disability Studies. Its mission is "to transform and empower disabled individuals throughout the Caribbean through the use of applied research, education and training and public advocacy", and its vision is "to make UWI the premier research, academic and policy-formulating institution for the disabled in the Caribbean and to assist in incorporating members of this community in a broader productive network in the region".

This mission then leads to the question of accessible content. The UWI Press has more than 500 books and journal articles available to educational institutions, with PDF/ePub compatibility for most screen-reading products with accessibility features. Here lies an excellent opportunity for collaboration to advance access to an underserved market and scale to higher education.

### Inclusivity

The Caribbean is known for its fragmented society based on its colonial past. The construct of race, class and identity is revealed in many ways. Yet the call for inclusivity demands relearning, dismantling and re-engaging through research, diverse scholarly output, social engagement and open dialogue. Creating awareness, advocating for and supporting capacity-building opportunities for inclusive education systems for all is the first step towards inclusivity in education. 'For all' cuts across social and cultural lines, disability types and languages, and engagement should start from early childhood education. The University of the West Indies Press provides an inclusive, accessible, uniting force through its educational resources. **Ri**

*Nadine D. Buckland is the former General Manager of the University of the West Indies Press, past Treasurer of the Association of University Presses and currently the Honorary Treasurer of the Association of Learned Professional Society Publishers.*

# 'Supporting mission-driven publishing amid unprecedented challenges'

## A Q&A with **Peter Potter**, Vice-president, Publishing Services at De Gruyter and Executive Director of eBound

### Tell us a little about your background...

I've been a part of scholarly communication and publishing for over 30 years. After studying ancient and medieval history in college (BA, Virginia Tech) and graduate school (MA, University of Virginia), I started my publishing career at Wesleyan University Press, where I had the good fortune to learn about book publishing from one of the great editors of her time, Jeannette Hopkins.

I held senior editorial positions at Penn State University Press and Cornell University Press. At Cornell, I collaborated with library colleagues on one of the first fully open access (OA) scholarly book series, *Signale*. In 2016 I returned to my alma mater, where I started a digital-first, open-access publishing program based in the library.

All of this has led me to engage ever more deeply with the problem of how to build a sustainable model for OA monograph publishing, which included serving as the lead for TOME (Toward an Open Access Monograph Ecosystem), a five-year pilot project of the Association of American Universities (AAU), the Association of Research Libraries (ARL), and the Association of University Presses (AU Presses).

### You've recently become executive director of eBound. Please tell us a little about the organisation and its aims...

eBound is a not-for-profit foundation launched by De Gruyter in 2022 to support mission-driven scholarly publishing at a time of unprecedented challenges. Funded in part by revenues generated from our University Press Library program, eBound offers grants to small and independent publishers to support the open dissemination and global usage of monographs and other content. Examples include making a book or series

of books OA or digitising a corpus of print content and then releasing it OA.

We also envision eBound funding original studies that help the industry develop new solutions to the most pressing issues facing scholarly publishing today. Also, eBound is guided by an advisory board of leading figures from the academic library and university press communities.

### How has the project progressed so far, since its launch last year?

So far, eBound has given out grants totalling \$150,000 to a number of recipients including Beth Mardutho: The Syriac Institute, SUPRR (Supporting Ukrainian Publishing Resilience and Recovery), and Duke University Press. We've also provided seed money to support the creation of a university press at Worcester Polytechnic Institute, which will focus especially on knowledge exchange in STEM from researchers in the Global South.

### How does the ethos of eBound fit in to the wider world scholarly communications?

eBound represents the creative thinking we need in scholarly publishing today – especially in HSS (humanities and social sciences) publishing, which has challenges that differ from those of STEM publishing. Of course, a single venture such as eBound can only do so much, but it is an example of the sort of creative collaboration between mission-driven commercial and non-profit publishing that I believe will help us find workable solutions to eminently solvable problems.

### What do you think is the biggest issue facing the industry at the moment?

Sustainability. Anyone who reads *The Scholarly Kitchen* or other industry publications knows the challenges facing the scholarly communication system as we try to find sustainable business models in an increasingly OA world. The truth is that OA is here to stay, but I'm also convinced we will have a hybrid ecosystem for years to come.

I'm old enough to recall the early 1990s when many predicted print's demise and the ebook's triumph. Well, as usually happens with prognostications, the future was more complicated than anyone envisioned. While ebooks have arrived, they continue to share



Peter Potter

the stage with print. I suspect the same will be true with OA – especially outside of STEM. Sustainability will require a balance between OA and paid content.

### Looking forward 10 years, what developments would you like to see in scholarly communications?

I would like to see a more balanced ecosystem in which library budgets aren't weighed down unduly by journal agreements that turn out to be less than "transformative". I'd also love to see a more equitable system for publishing scholarly books – equitable for authors regardless of where they teach and equitable for readers regardless of where they study or live. From my work with the TOME initiative, I'm convinced this is possible, but it will take collective will on the part of the entire scholarly community.

### Lastly, do you have any fascinating facts, hobbies or pastimes you'd like to share?

I wouldn't call it fascinating, but I'll say that I am, and always will be, an inveterate collector of books, especially used books. To this day, I can't walk by a used bookstore without stopping in for a brief visit ("Honest, I'll only be 10 minutes...") and then staying for an hour or more without leaving the main floor!

Interview by Tim Gillett





# Why preprint review is the way forward

Damian Pattinson and Emily Packer reflect on efforts to embrace new models of review and curation



Preprints remain a hot topic of conversation among the scientific and publishing communities, following their recent and rapid rise in popularity. While the trend goes back a few years, the Covid-19 pandemic certainly played its part in highlighting the importance of sharing new findings as quickly and openly as possible. Now, with the ongoing adoption of preprints among researchers, particularly within the life sciences and medicine, as well as a wider movement to advance open and equitable science, it is clear that preprints are here to stay – and that is good news for everyone.

### Preprint pros and cons – and opportunities

Since its inception, the science publishing system has seen very few meaningful changes. It remains slow and frustrating for authors, it takes away their power over the publication of their own work, and it is wasteful, with valuable time spent on peer reviews lost to both authors and readers if a paper gets rejected. On top of this, it puts greater emphasis on where authors publish their work, rather than what they publish.

But along came preprints, providing the foundations for a new process that can counter some of these problems. Preprints bring many benefits to scientists and, by extension, to science overall. They give more control to authors by allowing them to share their findings publicly as soon as they are ready. Readers can then access new studies on topics of interest to them, while other researchers can reuse and build on the findings for their own work.

However, their growth in popularity has also highlighted a lack of systems of review around preprints that mean readers cannot

### ‘Preprints bring many benefits to scientists and, by extension, to science overall’

easily assess the quality of new findings. This is the great opportunity for the future of research communication – bringing expert peer review and curation to the preprint literature.

A number of organisations are now doing just that, by embracing models that combine the speed and openness of preprints with expert peer review, full publication and curation. Some of them – eLife and Biophysics Colab, for example – are working with a shared vision in mind: a publishing ecosystem in which the significance of research is recognised on its own merits and independently of journal title. Some other models – including those used by PREreview and ASAPbio–SciELO Preprints crowd review – also take advantage of the open nature of preprints to enable researchers from groups traditionally underrepresented in science to participate in public review.

A few examples of these organisations and their respective models are described below. Together they represent significant community efforts to bring review and curation to preprints, and show how alternative models could work in a more open future for research.

### Preprint review and curation models

First of all, if we were to reimagine the current publishing system, which features would need to change? This was a question we asked ourselves at eLife, and

we landed on a number of criteria – not least that it should be fairer, faster and more transparent for authors.

In January this year we launched our new publishing model, which aims to achieve just that. This model ends the accept/reject decision after peer review; instead, all preprints that we peer review are published on the eLife website as a Reviewed Preprint, accompanied by an eLife assessment and the public reviews. For consistency, the eLife assessments use a common vocabulary that covers the significance of the findings and the strength of the evidence. Authors are able to include a response to the assessment and reviews if they wish to do so – the choice is theirs.

eLife’s new model forms part of our overarching ‘publish, review, curate’ mission, which also includes Sciety – a journal-agnostic platform that aggregates reviewed preprints from across the web. As a way of helping readers navigate the growing preprint landscape, groups that provide peer-review services can join and curate papers of interest to their communities on Sciety. What’s exciting about Sciety is that it allows, for the first time, multiple organisations to endorse the same preprint, creating an ecosystem where review and curation is performed by many groups, not just a single journal.

Both Sciety and eLife’s new model play key roles in what we see as the future for research communication: a diverse, global community of scientists producing open and trusted results for the benefit of all. Our announcement about the new model, and the model in practice, have led to ongoing and vibrant discussions among the scientific and publishing communities, but we have been pleased with the overall response. Since switching to the model in January, we have seen strong



submissions and positive feedback from authors. We have also received support from funders and institutions who want to see changes to the evaluation system to make it less dependent on journal titles and impact factors.

eLife is not the only organisation to adopt a flavour of the 'publish, review, curate' model. Biophysics Colab – an international collaboration of biophysicists working to improve the way original research is evaluated – also announced its shift to a full version of the model in February this year. Having run a preprint review trial since 2019, Biophysics Colab is now building upon this service and will soon be giving authors the option to create a final 'version of record' – equivalent to a journal article – after peer review of their preprint.

Another group that provides peer-review services is the National Coronavirus Research Compendium (NCRC) – a publicly available resource from Johns Hopkins Bloomberg School of Public Health, US, that rapidly curates and reviews emerging scientific evidence about Sars-CoV-2 and Covid-19. The faculty, fellows, alumni and students behind the NCRC select research for public health action and assign teams of experts to review and summarise the key findings of the papers. The NCRC now has a dedicated section on Sciety that readers can use as a landing page to find the compendium's preprint reviews and keep up to date with its latest evaluations.

A last example is ASAPbio–SciELO Preprints crowd review. This Brazil-based group reviews preprints relating to infectious disease research, posted on the SciELO Preprints server in Brazilian Portuguese. The SciELO Preprints server is an integral part of SciELO (Scientific Electronic Library Online), a bibliographic database, digital library and cooperative electronic publishing model of open-access journals. In 2022, SciELO Preprints became a collaborator in ASAPbio's crowd preprint review, an initiative to help foster public feedback on research posted as preprints. Public reviews contributed by SciELO Preprints and other collaborators in this initiative are also available on Sciety.

These are just some examples of the range of organisations offering preprint review and curation services, some of which plan to expand to even more communities of researchers and readers in the future. Just looking at the more positive community response to eLife's new model alone suggests that this is the way forward for research and research communication, and as such we can expect similar models to be adopted more widely over time.

#### So, what happens next?

As we have seen, however, change will not happen overnight despite calls from the community for more openness and transparency in research communication.

eLife and others are working to provide alternative models to one that is well established and deeply embedded in research culture and assessment, and there are still significant challenges to overcome. For example, there are still concerns that publishing in high-impact factor journals is necessary for researchers to be considered for funding and job opportunities. While this is indicative of the ongoing need for improvements in research culture more broadly, publishers still have their part to play – and collaboration will be key here.

This is why we continue to add groups to Sciety to showcase what they are doing in terms of reviewing preprints, and why we also welcome ongoing conversations about our new publishing model and research communication more generally. If a global community of researchers, publishers, funders, research organisations and other industry players can come together and discuss new ways of approaching research communication and assessment, we could soon see a more open future that better serves science and scientists. **Ri**

**Damian Pattinson is eLife Executive Director; Emily Packer is eLife Media Relations Manager. eLife is an independent non-profit committed to improving the way research is reviewed and communicated.**



# Who's afraid of open infrastructures? Joanna Ball, Yvonne Campfens and Tasha Mellins-Cohen underline the importance of non-profit infrastructure and standards bodies



Over time, the scholarly communications community has organised itself to develop a foundational layer of collaborative, cross-sector, community-led, not-for-profit infrastructure and standards bodies.

They are essential for many of the services that we rely on in finding, tracking, connecting and monitoring where content can be found and how it is published and used. We head up three of the smallest of these bodies, and here we outline the rationale behind their creation and the value they bring to the community, as well as explaining how the community can help these organisations thrive.

### Our origin stories

In the early years of digital content, every publisher measured usage differently and librarians didn't know what measures to trust. Recognising this challenge, Peter Shepherd gathered a group of librarians and publishers to create an industry standard for measuring usage, drawing on his history of digitisation projects at Wiley and Elsevier. The result became COUNTER (projectcounter.org), launched in 2003. Just as Peter was wrestling with the idea of community-defined metrics, Lars Bjørnshauge, Head Librarian at Lund University, took on another challenge. Seeing the growing volume of open access scholarly content, he set out to create a directory to help researchers and librarians across the world find, use and trust peer-reviewed OA journals, regardless of discipline, geography or language. The Directory of Open Access Journals (DOAJ, available at doaj.org) was born.

Twenty years later, both COUNTER and DOAJ are essential components of the knowledge ecosystem – but new

**'We are all owned and led by our community, and we're not for sale or for profit'**

challenges arise and new organisations are needed to help meet them.

In 2018, the idea for the OA Switchboard (oaswitchboard.org) was conceived to allow publishers, libraries and research funders to easily share information about OA publications throughout the publication journey, synchronising data from a multitude of systems and processes that would otherwise have to be manually connected within each separate organisation.

What do these organisations have in common? We are all owned and led by our community, and we're not for sale or for profit. We are foundational open infrastructure and standards bodies, operating behind the scenes with low budgets and limited staffing – none of us have salespeople, marketing teams, exhibition budgets or in-house technology support. We collaborate with one another and with bigger bodies such as Crossref, ORCID and NISO to create the foundations on which much scholarly infrastructure relies.

And foundations is absolutely the right word: scholarly communications is an exciting and innovative space with new commercial and non-commercial services springing up almost daily. We deliver value through open infrastructure, data and standards, and naturally services and tools have been built by commercial and not-for-profit groups that capitalise on our open,

interoperable data and services – many of which you are likely to recognise and may use on a regular basis.

### Building on strong foundations

The well-established and widely used Journal Usage Statistics Portal (JUSP) from Jisc is designed to collect COUNTER reports, using the SUSHI protocol we define in the Code of Practice to automate reporting. Jisc built JUSP as a way to reduce the enormous administrative burden of every library needing to individually download their usage reports from every publisher. Today, JUSP harvests usage metrics from more than 120 publishers on behalf of hundreds of libraries around the world, saving a huge amount of time and duplicated effort.

Turning our attention from usage of content to the content itself, library discovery systems such as EBSCO Discovery Service or Ex Libris' Primo have relied on DOAJ's unique dataset to provide access to high-quality, peer-reviewed OA journals in their databases. We list the largest number of quality open access journals of any index, with a far wider geographic coverage than either Web of Science or Scopus, so incorporating our metadata into library discovery services gives researchers access to a more diverse range of content with fewer access barriers than ever before, delivering on the original promise of OA.

On the topic of OA, research funders have for years wanted better insight into the published research outputs arising from their grant funding. The OA Switchboard's standardised data interchange protocol has meant that funders such as the Howard Hughes Medical Institute and FWF (the Austrian Science Fund) can for the first time quickly and easily be alerted when an article associated with one of their



**OPEN INFRASTRUCTURE: WHAT YOU NEED TO KNOW**

**1 COMMUNITY GOVERNED**  
We work with stakeholders around the world, helping them achieve their goals and advancing scholarly communication as we do it

**2 RESOURCING**  
When it comes to staffing, our teams are lean but never mean, and we are mostly reliant on volunteers to deliver our services

**3 GET INVOLVED**  
Become a committee member or ambassador, or just ask how you can promote us within your organisation!

**4 SUPPORT US**  
We're funded through membership, participation or supporter fees paid by libraries, funders, publishers and others who rely on us and use our services

grants is published – as well as being able to access reports by publisher, by author institution and by grant. Some have chosen to do this directly in the Switchboard, but those funders who have elected to use ChronosHub’s commercial services also benefit from our API: “The communications standards, the cleanliness of the data and the API that the OA Switchboard provides all help contribute to a better functioning ecosystem,” says Tom Jakobs from FNR (the Luxembourg National Research Fund).

**Sustainability and support**

We’re delighted that our services are so central to the knowledge community. The purpose of open infrastructure and standards is to provide a foundation on which other services may be built, where competition and commercial solutions can drive innovations and bring costs down, and the proliferation of services built on our foundations suggests we’re meeting a real need. Our next challenge is to ensure that we’re still around in the future, so the foundations are not pulled out from underneath the products and tools so valued by so many of our members and participants. To do that, we need to ensure we are sustainable. As the Principles of Open Scholarly Infrastructure (POSI, openscholarlyinfrastructure.org) outline, that means:

- We must not be reliant on grant

**‘To be truly sustainable, we also need maximum engagement with our communities’**

funding for running costs;

- All revenue-generating activities need to be aligned with our organisational missions, based on services and not on our open data and standards; and
- We need to generate a small surplus that will allow us to innovate and meet changing community needs.

Today, all of us meet that definition of sustainability, often through membership, participation or supporter fees paid by libraries, funders, publishers and third parties such as aggregators and technology providers who rely on us and use our services. As budgets come under increasing pressure, we’re calling for budget holders to consider the value we bring to the knowledge community and to continue supporting us as paying members of our communities or participants benefiting from our services.

For all that POSI defines sustainability

in financial terms, in our view, to be truly sustainable, we also need maximum engagement with our communities. This can be as simple as signing up for our newsletters, turning up for a webinar, or coming to say hello at a conference. Of course, we recommend embedding the tools and services we provide into your activities, whether that’s integrating DOAJ metadata into library catalogues to help users access a more diverse range of content, using the OA Switchboard to track your OA publications, or highlighting the return on library investments using COUNTER usage metrics.

If you want to really boost our impact, though, we’d love for you to consider becoming a more active volunteer. Our advisory boards directly influence our long-term strategies as well as our day-to-day operations, and having the widest possible range of voices in those groups is essential to us being able to continue meeting the needs of the knowledge community for well designed, stable infrastructure and standards. So drop us a line and get involved – we’d love to have you! **Ri**

**Get involved by contacting:**

**COUNTER:** [tasha.mellins-cohen@counterusage.org](mailto:tasha.mellins-cohen@counterusage.org); **DOAJ:** [joanna@doaj.org](mailto:joanna@doaj.org); or **OA Switchboard:** [yvonne.campfens@oaswitchboard.org](mailto:yvonne.campfens@oaswitchboard.org).

# Why simplification and matching user expectations are the key to UX

We ask **Dan Mayers**, head of product development at OpenAthens, to unveil the secrets of a first-class user **experience**

Delivering a seamless user experience is difficult – some might argue even impossible. But aiming to achieve it is key to creating leading products, says Dan Mayers, who has been leading product development at OpenAthens since 2021.

Organisations need to ensure they deliver what their users want, need, and expect, and the route to this apparent utopia lies in having user-centred principles. To deliver a top-notch user experience you need to “provide simple and intuitive tools that allow users the ability to complete their goals as quickly and effectively as possible”, says Mayers.

The principles to ensure a great UX are, in theory, straightforward: “Whatever the changes or improvements we make, they should be as simple and intuitive as possible for users to reach their goals.” He says the product team at OpenAthens uses user-centred design principles to understand customers and their audience, users, behaviours, needs and pain points: “It is the only way we can make sure that all of the products that we build serve their needs.”

It is increasingly important, he says, to make sure the content is accessible across platforms and to be aware that UX is constantly iterative. Designers need to “test their prototype and ensure it reaches their goals”. They can do that by doing



Dan Mayers, head of product development at OpenAthens

**‘Finding the pain points before starting a new project is fundamental’**

experiments or A/B tests for example. In a sector such as OpenAthens’, a granular level experimental approach “is really useful because we have a really tight community of great librarians that we work with”, says Mayers. “It’s much easier to sit down with them, talk through what their

challenges, problems and issues are, and design ways in which we can improve their working life. They’re the key.”

#### **The “feel-good factor”**

When working on a product for a librarian, it is important to understand the library administrator might be dealing with tens of thousands of user accounts.

“You don’t want to feel worried about what you are doing, you want to trust the software to do the right thing and to help you complete the job without having extra concerns,” says Mayers. “We need to think about how people feel about what they are doing in their day-to-day lives and the associated emotional experiences. So,

they will feel good about doing something, instead of worried about it.”

It is also important to be aware of the type of product you are dealing with. Mayers recognises the highly technical space in which OpenAthens sits: “It is important that we up our game in our sector to ensure we match the librarians’ expectations. It is a very complicated space, which doesn’t mean we should shy away from trying to achieve seamless, intuitive, and enjoyable experiences for people.”

### Embracing user-centred design processes

On occasions, designers get disappointed when they share their work and the audience doesn’t understand it. “The problem is never the user, but the designer that has to make it work and mitigate the risk of getting something wrong”, says Mayers. There is always room for less costly mistakes by testing before going into the development phase. “The best practice is to have user-centred design processes, a UX flow from the research phase through to the prototype, as well as understand the pain points, personas and customer journeys to build designs that can be tested with users.”

Finding the pain points before starting a new project is fundamental: “We do research to understand where the friction is because it could generate problems that bubble into a full product design.” The information comes from multiple feedback channels such as the product data feed, advice from the service desk, surveys, external research. “Our product team aggregates all the information, works out the most important points to focus on and generates product designs or enhancement requests for existing users”, says Mayers. “We want to improve the user experience, and it is the experience of people that will guide what those changes are going to be”.

### A product for international audiences

User experience is the star around which product development gravitates. This poses a challenge for products designed for international audiences, targeting users with very different backgrounds and needs. For Mayers, there are two different strategies to achieve success: make sure that it is as international and simplified as it could be to reach as many people as possible and think about it as an international product, to which localisation is fundamental: “We are looking at doing more localisation. I think it is important because we are a global company, and our focus is removing barriers to knowledge. If language is a barrier, we need to make sure that we are overcoming it.”

## ‘User experience is the star around which product development gravitates’

### Looking at the future of the industry

If there is something pressing in the near future for the industry, Mayers believes it is upcoming browser changes, which will affect authentication providers. “OpenAthens has a technical team with a lot of experience in this sector and area. We are aware of the changes being proposed and are continually doing research and development to make sure we are ahead of whatever those changes are, so our customers have a minimal impact”, says Mayers. “It is important that our customers can trust us to be ahead of

the curve on technical changes given the complexity of the sector.”

He believes trust is another important factor linked to user experience, coming to the spotlight more and more as AI impacts product development. “AI will provide opportunities across the academic sector, but also challenges, particularly around trust”, says Mayers. “Researchers need to be able to trust the research they are getting hold of, and some elements of AI struggle at making sure that all the information is absolutely correct.”

Mayers reflects on the company’s more than 25 years and how important the relation of trust with its customers is: “Over that time, many customers have required features and enhancements, which has generated a lot of specialisation in the product. We are trying to look at the current experience from a user perspective, focusing on making improvements that help librarians in the way they work within OpenAthens. It is all about simplification. The first thing will always be making the product easier to use for them.” **Ri**

### Pete Hill, UX Designer at OpenAthens – the voice of the expert

For Pete Hill, UX designer at OpenAthens, the fundamental principle behind user experience design is to “mitigate risk by making sure that what you are building is, in the first instance, desirable and useful as well as usable”.

“Products need to bring value to users and have a solid purpose,” says Hill. “This is done by validating with users at every step of the way, to make sure that what we deliver fits the needs of those people.”

To succeed with UX, not everything lies in the design and research. It is important that the group of stakeholders are on the same page when it comes to user-centred principles. “It is important not to assume that only the people with ‘UX’ in their job title are the ones who conduct user-centred design. Both, user-centred design and UX, are a collective responsibility of the whole team,” says Hill. “You have to be realistic and bring everybody along. It’s a constant conversation, an iteration with fellow stakeholders and users to incrementally implement small improvements testing and course-correcting as you go along.”

The approach to UX has not really changed in a long time: “It’s been the same since people started making products. Humans haven’t changed, just the tooling changed,” he says. One

fundamental thing that did impact UX over the past years was Covid-19 and moving to remote work: “It was the biggest change in recent times. The fact that we couldn’t do in-person interviews in the way that we used to, technology had to move on extremely quickly.”

There are also external challenges and pressures: “People are spoiled by using Facebook, Twitter or YouTube, which are really polished, really mature, and they expect even small organisations like OpenAthens to reach those levels.”

Ironically, everything on the internet looks similar to a certain degree. “One of the beautiful things about the internet and web software is that, in order for it to work as a whole, everybody has to do things the same way to a certain degree. If every website had different navigation, the internet would be unusable”, says Hill. “To a certain extent, a lot of the work is done for us, and a lot of the evolution is done collectively. It is just about being receptive to it, and knowledgeable enough to recognise improvements, and adopt them in your work.”

“The most important thing is to have empathy and humility to accept that you are not your users, and allow them to guide the process. What a team thinks might work, just might not fit actual users. Finding that out sooner rather than later is fundamental.”





# 2023 JCRs 'redefine trust and impact'

## Nandita Quaderi explains the important changes to the 2023 Journal Citation Reports release

In our rapidly evolving world, the pursuit of knowledge relies on trustworthy and reliable sources. For nearly half a century, the Journal Citation Reports (JCR) has been a beacon of credibility, providing the global academic community with invaluable insights into the world's leading journals. The 2023 release of the Journal Citation Reports includes updates that usher in a new era of comprehensive coverage and the evolution of the Journal Impact Factor (JIF) to become an indicator of journal trustworthiness as well as impact.

Our unwavering commitment to delivering transformative intelligence has led us to expand the scope of the JCR, ensuring that it remains an indispensable tool for researchers, publishers, editors, librarians, and funders. The 2023 JCR release encompasses more than 21,500 high-quality academic journals across more than 250 scientific and research disciplines. Our editorial team's rigorous selection process means that users can trust the information and data we provide, as only journals meeting our stringent quality criteria are included in the Web of Science Core Collection index.

### Embracing important changes

Central to the JCR's reputation is the Journal Impact Factor, a widely recognised metric that has served as a measure of scholarly journal impact for almost 50 years. This year, we have taken a significant stride forward by extending the JIF to all quality journals in the Arts and Humanities Citation Index (AHCI) and the multidisciplinary Emerging Sources Citation Index (ESCI). As a result, more than 9,000 journals from more than 3,000 publishers around the world have received a JIF for the first time.

Our decision to give all quality journals a JIF provides full transparency to each and every article and citation that has contributed to a journal's scholarly impact, helping to demonstrate its value to the research community. It also helps level the playing field for all quality journals including those that are open access, recently launched, or have a niche or regional scope. This year's release reflects that increased diversity, with 5,600+ of those journals –

## 'A transformative step towards trustworthiness, transparency, and accountability'

more than a quarter – publishing all their content open access, and more than a 7% increase in journals from the Global South. These key highlights exemplify the dynamic and increasingly inclusive nature of scholarly research in today's world.

Another important change this year is that the 2023 JCR release presents the JIF with one decimal place, rather than three. This move to one decimal place will introduce more ties, which we hope will encourage users to consider additional indicators and descriptive data when comparing journals – fostering a more holistic understanding of a journal's influence and impact.

This year's changes are part of an ongoing evolution: in 2021 we added AHCI and ESCI to the JCR; this year those additional journals are also eligible to receive a JIF; and next year they will also be included in JIF rankings and quartiles.

One of the many other useful indicators available within the JCR is the Journal Citation Indicator (JCI), a field-normalised, journal-level metric that facilitates easy interpretation and cross-disciplinary comparison. By highlighting this metric, we empower researchers to make fair comparisons between journals from different disciplines, which often have different overall levels of citation activity – for example, citations in the arts and humanities are generally lower and slower than those in the sciences. This indicator further helps them to identify journals of utmost importance in their fields.

### Reinforcing a strong foundation

The 2023 JCR represents a transformative step towards trustworthiness, transparency,

and accountability. Our editorial team meticulously evaluates publications for inclusion in the Web of Science, the world's largest publisher-neutral global citation database. This rigorous evaluation process, conducted by a global team of expert in-house editors, ensures that the JCR data are accurate and reliable, instilling confidence from the academic community.

The landscape of scholarly publishing is continuously evolving, and so must our approach. Throughout my career – as a researcher, a senior publishing executive, and in my current role with the Web of Science – I have always been aware of the challenges we, the scholarly community, face in knowing what content to trust. That is why we remain committed to delivering unbiased and publisher-neutral information, ensuring that our users can make confident decisions and rely on the data and metrics in our products, reports, and analyses.

### 'It takes a village'

There is a general consensus that all members of the scholarly community have a shared responsibility to uphold research integrity – no single stakeholder can tackle this issue by themselves. Elisabeth Bik expressed it well at the recent SSP annual conference in Portland when she said: "It takes a village."

I invite publishers, librarians, researchers and all other stakeholders to explore the wealth of data and indicators offered by this resource, and the meaningful comparisons and insights they can unlock.

The JCR is so much more than just the JIF; it is a comprehensive journal intelligence platform built on a highly selective and curated dataset. Trusted data and metrics have become ever more important in the face of increasing levels of fraudulent content polluting the scholarly record.

We look forward to working with the community to ensure the integrity of the scholarly record serves as a reliable foundation for research and discovery for many generations to come. **Ri**

**Nandita Quaderi is Editor-in-Chief and Vice President of the Web of Science, ClariVate.**

# 'Born in India, but for the world'

**Vivek Mehra describes the foundation of Vikramshila, which aims to 'embrace academics of all nations'**

**Tell us a little about your background and qualifications...**

Over 20 years of my career have been spent in supporting higher education. Sixteen of these were spent in publishing research. I'm the former CEO and managing director of Sage Publications India, a top-tier publishing house well known for its books, journals, and digital products. I also served as its chairman for a year.

Over the years, I have been recognised for my work through many awards. The government of Maharashtra conferred me with the "Vijayshree" award in 1994 for simplifying complex dehydrating technology, ensuring a brighter future for small-scale farmers.

In 2019, I was recognised by the New Delhi Institute of Management for my management and leadership skills, with the Business Excellence and Innovative Best Practices Academia Award. Before that, in 2016, Sharda University conferred me the Sharda Top Rankers Excellence Award for Visionary Leadership.

I started my career in the textile industry by getting a Bachelor's degree in textile technology. This was followed by an MBA in marketing and two degrees in intellectual property law. Both of these were from premium institutions in the USA. On my return I tried my hand at several different industries, but had mixed success.

From each of my failures I learnt what I could or couldn't do. India in



Vivek Mehra

the 90s had few opportunities for my qualifications and even fewer for struggling bootstrapped entrepreneurs. I was perhaps a renegade at that time, but today I would be known as a serial start-up entrepreneur! I finally ended up finding my calling in publishing. It is in this role that I studied for a postgraduate diploma (and certificate) in law.

I am currently pursuing my PhD in management from an Indian university. I also serve as the honorary council member

and Member of Board Studies for the Association of Learned & Professional Society Publishers' (ALPSP) journal, *Learned Publishing*. I'm currently a Board of Studies member at the School of Business, Public Policy and Social Entrepreneurship at Ambedkar University Delhi and also a part of the quality assurance committee at the same university.

I have served as the vice-president of the Association of Publishers in India and am on the committee of CII and FICCI on IPR, Copyright and Higher Education. Passion for learning drives me constantly.

**'When reality sank in, I turned to skills I possessed'**

**What inspired you to pursue a career in publishing and scholarly communications?**

My career in publishing began as a failed author. When I heard about the prize

money for a Booker Prize I was convinced this was money for jam. I wrote a novel, then spent a year and all my savings pursuing publishers to get my book out. I even travelled to London to meet with some high-flying literary agents. But of course, all of it was in vain.

When reality sank in, I turned to skills I possessed. India was at that time just becoming a powerhouse for outsourcing. I took up a freelance assignment as a language editor for an Australian technical training company. I then became a trainer with them. I was later recruited by an MNC academic publisher. For close to two decades now I have been in academic publishing. This has helped me understand the landscape.

### **What is the background to the foundation of Vikramshila?**

In my stint as a representative of a foreign publisher in India, I was exposed to the workings, challenges, and possible opportunities in academic publishing. My focus was India, as it currently has more universities and institutes than even the USA. While the going was good as a representative there came a point when we had to part ways.

Vikramshila is a mission to help India and the developing world break the stranglehold that Western publishers continue to enjoy on global academic publishing. While they have been in India for decades, their focus is clearly to sell products created for their primary markets; India was where they sold their remaindered stocks. Some publishers did invest in building Indian publishing, but after a point they returned to their roots, growing their own portfolio of Western-focused content and publishing.

I can say this with confidence simply because I was equally a part of the system I am confident of challenging now. India and the developing world have actually handed over control of content taught in higher education establishments to foreign publishers. These foreign publishers feign to have domestic programs, but when you peek behind the curtains you see that what is touted as Indian or Asian is just a rehash or toned-down version of content published in the Western world. Local Indian authors are selectively published, and most have their first ISBN from a foreign location.

The result is that India's intellectual capital is not credited; the foreign ISBN or ISSN identifies this as foreign intellectual property. While India got its freedom in 1947, the damage done by Lord Macaulay's move to introduce Western education in 1835 continues to influence

## **'It is about truly discarding the barriers of discrimination or rather market segmentation'**

Indian academia in thinking publishing abroad is validation and prestige.

To be fair to Indian academics and those of the developing world, there never was a serious attempt to create an ecosystem that would help locals believe in their publishing. There were copyright violations aplenty and for India, a nation that once struggled to feed its masses, taking shortcuts was easier than going through the pain of draconian print laws that were formed by the British, but never abandoned even after independence.

The India of today though is different. As far back as 2015 I had predicted that the next revolution in HE for the masses would come from the East.

### **Please describe the intended activities of Vikramshila and what it aims to achieve**

Vikramshila gets its name from the third largest university in Ancient India; a university that was destroyed simply because the invader didn't want such a treasure house to exist. Mission Vikramshila is to take the first step in building a culture of disseminating local research for the people who will want it the most.

Vikramshila is born in India, but is for the world. It is about truly discarding the barriers of discrimination or rather market segmentation where content for the Western world rules the roost.

Vikramshila will launch a series of open access products where the focus will remain equal opportunity. We will redefine the parameters of transparency, speed, and costs to help academics across the world. Perhaps the single biggest contribution we strive to make is to ensure India's reliance on foreign publishers is challenged; perhaps even broken.

In India, there is a mission known as 'Atmanirbhar Bharat', which translates to 'self-reliant India'. Vikramshila aspires to be a contributor to the transformation of India into a 'knowledge superpower' and a global leader. Mission Vikramshila is an honest attempt to represent every research scholar who feels she isn't given a fair chance to present her case for publishing her research.

Vikramshila will embrace academics of all nations who feel they need an alternate to Western publishers with their exorbitant costs, opaque publishing processes and market segmentation practices.

### **What are your long-term hopes for the organisation – and, in a wider sense, the scholarly communications scene in India and beyond?**

There is little value in predicting the long term because we live in a very dynamic world. The Internet democratised a lot of monopolies, and few saw this coming in the 80s.

In many ways this democratising helped research. But there still remain barriers to disseminating, especially to developing nations. Mission Vikramshila, besides providing a cost-effective and transparent platform to academics, will in the medium term be able to provide content to students in a manner that puts the student first. With India's large numbers of academics who still struggle to get published, Mission Vikramshila will open doors to wider dissemination. For a nation relying heavily on Western content, and thus imbibing Western thought, Mission Vikramshila will be a pathway to traditions, learnings and practices that work directly for the locals.

The East was where learning first began, the West where it grew, but somehow Eastern thought was put on the back burner as we were made to believe we were inferior in our ways. It is time to set the balance right; it is time for nations like India and continents like Africa to publish their traditional learnings. We need an alternate pathway to research our own traditions even as we learn about the advancements in the West. Mission Vikramshila is a commitment to staying this course.

### **You sound like a very busy person, but do you have any interesting hobbies or pastimes you'd like to tell us about?**

One can never be too busy to pursue one's passion. What began as a therapy to manage rising blood pressure is now an integral part of my daily routine; Ayurveda, Yoga and Pranayam. Cooking is a stress buster and researching ancient lost recipes is a passion. I am teaching myself the art of slow cooking; some dishes are cooked overnight on a bed of coals and yes, I am mad enough to wake up at odd hours to stir the pot.

India's educational needs keep me up at night. Solutions don't exist, but they are not difficult to find. Perhaps you could say the quest to find solutions is now a hobby that I am hoping to make a full-time career of. [Ri www.vikramshilaedu.in](http://www.vikramshilaedu.in)



# New White Papers available online



## Global perspectives on research management SPRINGER NATURE

This white paper brings together insights from eight Research Management and Administration (RMA) experts around the globe, on the growing role of research managers.

## Information Seeking and Consumption Study Report COPYRIGHT CLEARANCE CENTER, OUTSELL

More than 600 information professionals around the world share how copyrighted content is reused and shared in the workplace

## Reflections on the REF 2021 SYMPLECTIC

Reflections on the REF 2021: Use of a research information management (RIM) system to support output collation and curation processes

## It is not Transformation if Nothing Changes FRONTIERS

A Frontiers white paper on the impact of transformative agreements in the transition to open access publishing

## Grammarly vs. AJE Digital Editing RESEARCH SQUARE / AJE

Which AI-based editing tool is most effective for research institutions?

## Open access advocacy is high, despite pressures on librarians AIP PUBLISHING

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We make it easy for people to access knowledge through single sign-on and managed proxy. We strive to be the world's most user-friendly remote access experience. More than 2,600 organisations worldwide use the OpenAthens complete solution to provide users with simple, secure access to online resources.

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