



**ADVANCING
KNOWLEDGE**

SPRINGER NATURE
Annual progress report 2023



**WE ENSURE CREDIBLE AND RELIABLE RESEARCH
IS ACCESSIBLE, TO PROTECT THE TRUTH, PRESERVE
THE JOY OF LEARNING AND TO INSPIRE HOPE FOR
NEW POSSIBILITIES.**

CONTENTS

STANDING UP FOR SCIENCE

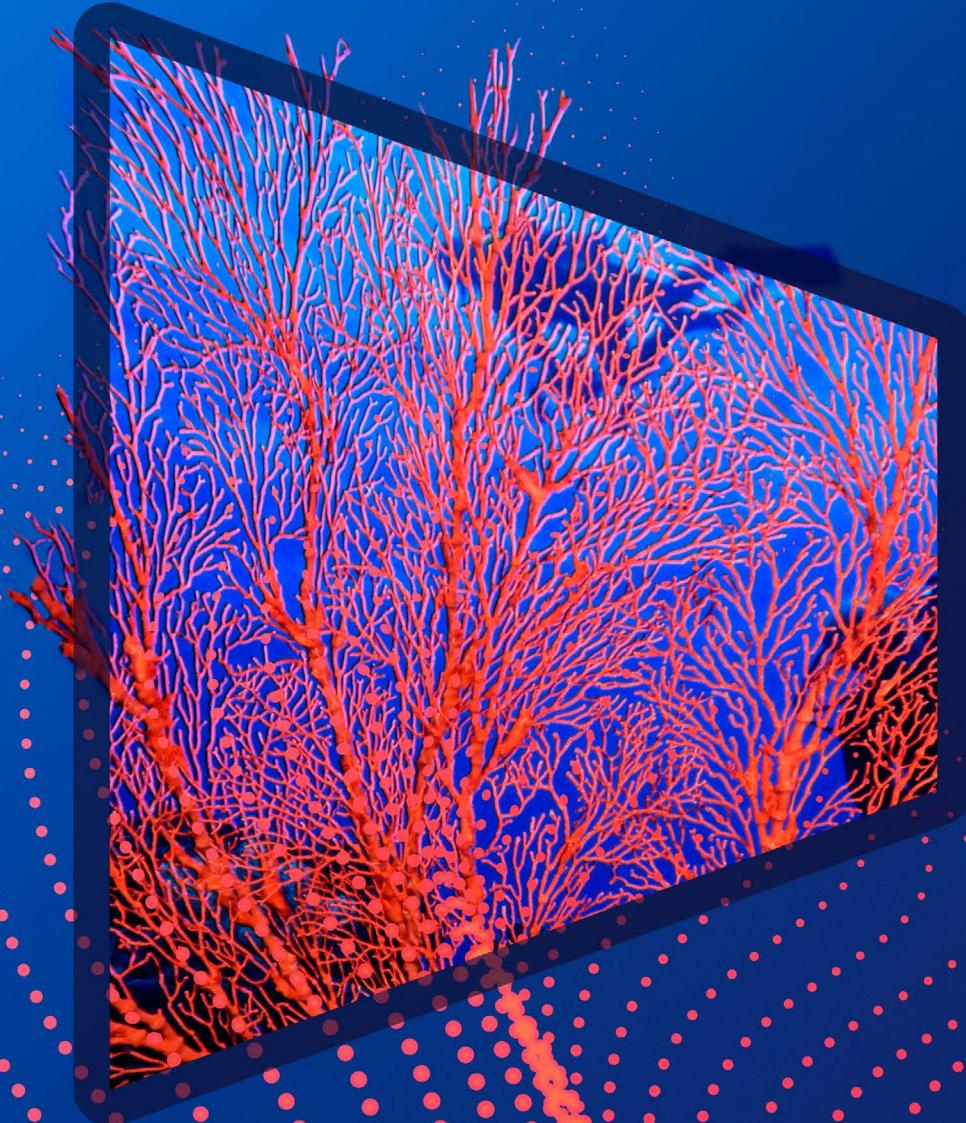
- 4 Opening doors to discovery
- 5 Chair's introduction
- 6 CEO's introduction
- 8 In the spotlight: Research integrity

UNLOCKING KNOWLEDGE

- 10 Our history
- 11 Our network in numbers
- 12 Our business
- 13 Research
 - Introduction
 - Accelerating discovery through technology
 - In the spotlight: Artificial intelligence
 - In the spotlight: Discovery platform
- 19 Education
- 20 Health
- 21 Professional
- 22 In the spotlight: Open access

OUR PERFORMANCE IN 2023

- 27 Financial review
- 29 Segment reviews
- 33 People
- 36 In the spotlight: India research tour
- 37 Sustainability
- 39 Governance
- 41 Outlook



STANDING UP FOR SCIENCE

- 4 Opening doors to discovery
- 5 Chair's introduction
- 6 CEO's introduction
- 8 In the spotlight: Research integrity

OPENING DOORS TO DISCOVERY



TRUST
MATTERS

In a time of rapid technological change, scientific progress and increasing misinformation, we all need insights we can trust.

That's why we are committed to providing dependable, trustworthy and authoritative content and data across all our well-known brands, which is transparent and accurate. By upholding these values and with a strong focus on safety and ethics, we strive to earn the trust of the many communities we serve.

95%

of our customers agree we publish 'rigorous research that can be trusted'



KNOWLEDGE
WITHOUT
BOUNDARIES

Solving the planet's biggest challenges requires teamwork, cross-disciplinary thinking and openness.

We aim to offer a home for research across our wide portfolio of books and journals. Partnership, diversity and a commitment to open research are central to our endeavours and, we believe, key to unlocking the mysteries of our universe.

8.5m

downloads per day in 2023



CURIOSITY
DRIVES
PROGRESS

If innovation is the beating heart of our business, then curiosity is the air we breathe.

We've always been curious by nature, asking questions, trying new things and rejoicing in the different. We are excited by the potential that artificial intelligence (AI) and technology provide to accelerate discovery, promote equity and protect integrity and trust.

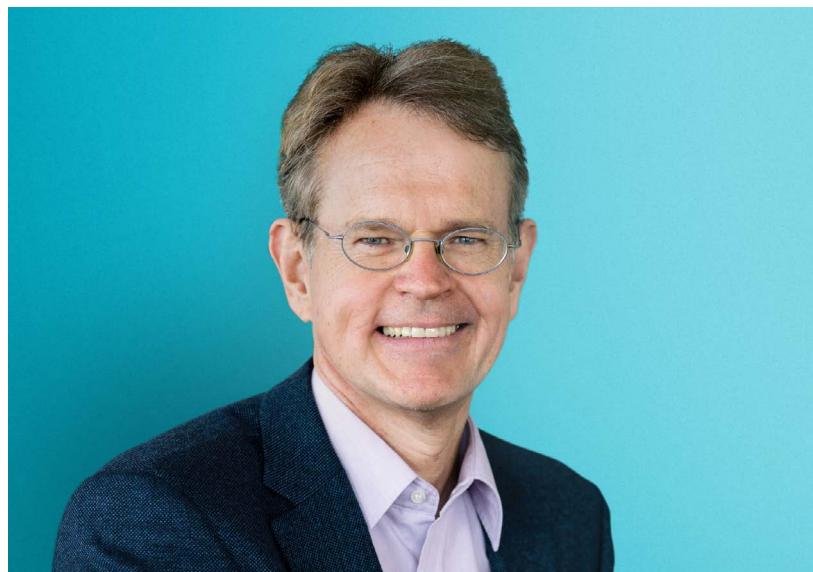
1.4m+

OA articles published to date

A PARTNER TO SCIENCE

We're one of the leading global research publishers. We are the second biggest by number of publications, and the only one among the traditional publishers for which publishing research is the major focus of the business. Our main customers are universities (through their academic libraries), government institutions, corporations, individuals and, especially with regard to open access (OA) models, research funding bodies including charitable foundations.

CHAIR'S INTRODUCTION



SUPPORTING OUR RESEARCH AND EDUCATION COMMUNITIES TO INSPIRE CHANGE

At Springer Nature, we work closely with a large global community of researchers and educators who want to make a positive difference to society. Our mission is to support them, accelerating solutions to the world's biggest problems through the discovery and dissemination of trusted knowledge. The foundation for this is our extensive publishing programme across research, education, professional and health. The driver is our people.

Across the 40+ countries where we have operations, our 9,400+ colleagues share a passion for bringing greater understanding to the world. This is reflected in our employer brand, Be Part of Progress, which we launched this year and which captures why people choose to work for us, as well as what to expect from a career with us. I was pleased to see our colleagues immediately living up to these words by growing our Green Office Network, which focuses on reducing our environmental impact and which doubled in size this year to more than 400 active members.

66

Change to make the world a better place for all does not come without effort – it requires vision, passion and perseverance, qualities that have been hallmarks of our company from the very beginning.

Progress is also what the Sustainable Development Goals (SDGs) are all about. 2023 marked the halfway point of the SDGs and we remain steadfast in our commitment to them. Since 2015, we've published more than 940,000 articles and book chapters with SDG-related content and, in nearly 500 of our journals, the majority of the content is related to the goals. We are now intensifying our efforts to amplify the SDGs through our research publishing and our engagement programmes for teachers and children. Change to make the world a better place for all does not come without effort – it requires vision, passion and perseverance, qualities that have been hallmarks of our company from the very beginning.

Our roots stretch back to the 1840s, when Daniel and Alexander Macmillan, Scottish crofters with a zeal for education and learning, launched a publishing company in London. This year we celebrated the 180th anniversary of our global brand Macmillan Education with '180 days of

giving back'. Under the programme, we gave our colleagues in Macmillan Education around the world, from Mexico to Eswatini to India, one day's leave to volunteer for a charity supporting learning in their region – a wonderful initiative. Also this year, we commissioned a study of 5,000 researchers to understand their perception of diversity, equity and inclusion (DEI), with a view to making science and research more equitable and accessible.

I'm really proud of these and the many other efforts made by our people to safeguard hope and inspire change in 2023, and I know we'll see more in the years to come.

Stefan - Holtzbrinck

STEFAN VON HOLTZBRINCK
Chair
Springer Nature

CEO'S INTRODUCTION



“

We want to grow our business, but in a responsible way and at a pace that allows us to maintain the high standards and impact of our trusted brands.

FRANK VRANCKEN PEETERS
Chief Executive Officer

GROWING STRONGLY AND RESPONSIBLY

In 2023, we made good progress in pursuit of our mission to support researchers and help find solutions to the world's biggest problems. Through our significant investments in the latest technology, we relaunched our main discovery platform, SpringerLink, which now hosts all our research content across the organisation. We also increased our range of innovative solutions that are helping to take the friction out of the publication process. We helped find a home for a very broad range of research by publishing more than 420,000 papers, our most ever, as well as record numbers of OA articles and books, and content related to the SDGs.

Even more pleasing to me than the growth was the way we achieved it. Preserving trust and quality will always be our highest priority at Springer Nature. We want to grow our business, but in a responsible way and at a pace that allows us to maintain the high standards and impact of our trusted brands. The passion and commitment of our people to protecting integrity, along with the investments we are making in this area, give me confidence that we are firmly on the right track.

BREAKING DOWN BARRIERS TO KNOWLEDGE

We believe that the most sustainable form of research is OA, free for all to use immediately on publication, driving more downloads, citations and reuse than subscription content. Around 44% of our primary research articles were published OA in 2023, up from 38% in 2022, and our market share grew. In 2024, we hope to reach the 50% OA mark, which will be a major milestone for Springer Nature and for mixed-model publishers in general.

We're accelerating the shift to OA in several ways, including through transformative agreements (TAs), which we helped pioneer. TAs enable funders and institutions to cover OA publication costs and subscription access for their affiliated researchers. We significantly expanded the number of TAs in North America in 2023, and signed our first agreements in several countries and regions, including South Korea, South Africa and Greater China. We also renewed a major TA in Germany, which tells us that our customers view these types of agreements as providing good value.

INVESTING IN TECHNOLOGY TO ADVANCE DISCOVERY

The other major driver of the transition to OA is technology. Since 2021, our investments and operational spending on technology has totalled over €470m. Over a third of our Research segment staff are in tech-heavy roles, as we look to provide better, faster digital experiences for our community of researchers, peer reviewers and editors. Our new article processing platform, Snapp, is a good example of how we are making publishing simpler and more rewarding. In December 2023, Snapp reached the milestone of supporting one million submissions, 75% of which were OA.

We're using AI and machine learning to power Snapp, and many other tools, solutions and platforms. We believe AI offers huge potential for our communities, when managed carefully with human oversight – it's the reason we acquired the science division of our technology partner Slimmer AI in 2023. But we also know that AI is different to previous technologies, and that this is causing concern. Our job therefore is to ensure responsible and ethical use of these tools in the interests of scientific discovery and research. We have developed policies for researchers around authorship and images, and have created an AI governance framework to guide and work alongside our innovation process.

DEFENDING TRUTH AND INTEGRITY

In 2023, there was much focus in our industry on integrity and reputation. For researchers, trust has become an ever-bigger factor in deciding which publisher to work with. Against a backdrop of rising disinformation and fraud, we're making significant investments to protect the scientific record. We doubled the size of our research integrity group and rolled out new AI-powered tools that are helping us spot fraud and manipulation in articles.

We're also working with other publishers to inspire confidence for the future, through bodies such as the STM International association, partnering with its Integrity Hub initiative. When integrity issues occur within research publishing, it can affect trust across the whole industry. I'm pleased to see that academic institutes are also taking measures to help improve research integrity.



We have aimed to create a hybrid working policy that provides colleagues with flexibility while allowing us to build a culture and a value system that is unique to Springer Nature.

STRENGTHENING OUR CULTURE

We want to be a great company to work for, living our values and unlocking our people's potential. One of the ways we measure our progress is through our annual engagement survey, and in 2023 our headline scores rose again. We've aimed to create a hybrid working policy that provides colleagues with flexibility while allowing us to build a culture and a value system that is unique to Springer Nature.

This year we increased our efforts around DEI, with further training for all colleagues, as well as mentoring and internship programmes. Having made good progress on gender representation in recent years, we're setting new global representation goals for race and ethnicity in senior leadership roles, and targets to make sure our leaders reflect our footprint around the world.

LOOKING AHEAD WITH CONFIDENCE

There is much to worry about in the world today, including war and conflict. Knowledge spreads fastest, and for the greatest good, when there is geopolitical harmony. Despite these challenges, we remain optimistic about the future. Spending on research and development continues to grow, and this means there are more papers and books that need to reach their audience, and more discoveries that will come to light. In 2024, we've already seen a healthy growth in submissions, and we've continued to invest in our systems and people to ensure that we keep expanding the global pool of knowledge for the benefit of society.



FRANK VRANCKEN PEETERS
Chief Executive Officer
Springer Nature

IN THE SPOTLIGHT



It's not just my team that is deeply committed to research integrity; it's something that runs through the whole organisation, and I'm really proud of that.

CHRIS GRAF

Research Integrity Director

Protecting and promoting research integrity

To solve the world's biggest challenges, we all need research that's reliable, trustworthy and can be built on by scientists and innovators. As a leading global research publisher, we have a pivotal role to play. At a time when science is increasingly under threat from fraud and misconduct, safeguarding integrity is our highest priority.

We're committed to promoting integrity throughout the research cycle, from protecting the publication record and providing our editors with the tools to remove problematic content, to supporting the scientific community in applying rigour and good practice. Our approach is driven by our expertise and our substantial investments in people and technology, and through collaboration and leadership in the industry.

Our editorial staff are supported by a team of experts. In 2023, the Springer Nature research integrity group doubled in size. The group prevents and resolves integrity problems and supports our network of more than 174,000 academic editors and our editorial office teams, sharing knowledge and insights and providing training on how to mitigate risks and detect misconduct.

Many conversations about research integrity today focus on identifying and solving problems around plagiarism, authorship disputes and 'paper mills' – organisations that make money by deliberately setting out to publish dubious manuscripts by manipulating editorial and peer review processes. Besides our quality-control checks, we're using the latest technologies, including AI, to identify unethical behaviour.

In 2023, we launched Geppetto, an AI-enabled tool that trawls submissions across all our journals for indicators of suspicious text, and started testing SnappShot, which screens for manipulated images. Using our in-house tools and expertise, we identified and stopped publication of 8,000 submitted papers with major integrity problems in 2023.

The most trustworthy, robust research emerges when researchers adopt good practices from the outset. To support this, we're running a large project to understand the integrity-related needs of researchers, and have created free online training resources, including a dedicated *Nature* Masterclass course called [Research Integrity: Publication Ethics](#). Our editorial policies are frequently reviewed and updated to promote better research practices and encourage researchers to share data, increase transparency and reproducibility, improve citation diversity and promote responsible authorship methods.

We're also driving and supporting improved practices across the industry. We played a key part in establishing the STM Integrity Hub, a publisher-driven initiative to protect research integrity, and our employees play an active role in its operations, including chairing its governance board. In October 2023, the hub launched a pilot programme to detect duplicate submissions, which can be an indicator of research malpractice across multiple journals, publishers and submission systems.



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 - In the spotlight: Discovery platform
- 19 Education
- 20 Health
- 21 Professional
- 22 In the spotlight: Open access

OUR HISTORY

At Springer Nature, we place great pride in our heritage. Our story began in 1842, when Julius Springer founded a bookstore and publishing house in Berlin. At first, Springer focused on political publishing, but quickly expanded into journals and books about the natural sciences, engineering and medicine, helping pave the way for the modern knowledge-based society. By the early 1900s, Springer was the world's second biggest academic publisher, with a contributor roster including Albert Einstein.

SPRINGER

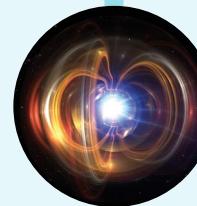


MACMILLAN

In London in 1843, two Scottish brothers, Daniel and Alexander Macmillan, launched a publishing company to promote great writing. Meanwhile Macmillan, having published Lewis Carroll's *Alice's Adventures in Wonderland*, had broadened its business into learning, launching the scientific journal *Nature* in 1869.

BMC launched as first commercial OA publisher

2000



Springer founded in Germany

1842

Throughout the 20th century, both Springer and Macmillan became renowned for publishing groundbreaking research that changed our understanding of the world, from work on radioactive substances, to the discovery of the structure of DNA, and a paper describing Dolly the sheep, the first mammal to be cloned from an adult cell.

First TA signed with Dutch Library Consortium

2014

First company to publish one million OA articles

2015

SPRINGER NATURE
Springer Nature formed

Net zero targets verified by Science Based Targets initiative

2021

Published 2,000th OA book

2022

2023

Scientific Reports launched, now the world's largest OA journal



Macmillan founded in the UK

1843

Nature journal launched

1869

Over the past 30 years, Macmillan and Springer passed through various hands before merging in 2015 to become Springer Nature, a global research, education, health and professional publisher, with headquarters in Berlin.

OUR NETWORK IN NUMBERS

WE'RE A GLOBAL BUSINESS
OPERATING AT A LOCAL LEVEL

3.5k

Institutions globally where
researchers benefit from TAs

9.4k

People

40+

Countries

100+

Offices

WE PUBLISH TRUSTED INFORMATION
WITH EXTENSIVE REACH

1.2m

Independent peer reviewers

174k

Editors from >75 countries

c.3k

Journals

1.8m

Articles submitted

420k

Articles published

14k

Research books published

86

New education textbook series published

WE ADD VALUE TO RESEARCHERS
AND SOCIETY

4.3

Average citations per article¹

3.1bn

Content downloads²

940k

SDG-related articles published³

87%

Excellent/good rating from authors⁴

c.30%

Lower cost per download⁵

No.1

Reputation score⁶

WE INVEST FOR OUR COMMUNITIES

€173+m

Technology-related spend⁷

c.€900k

In donations to good causes

€26m

APC fees waived for authors⁸

1 2022 articles: Source Digital Science, Dimensions. Article citations in publication year and year after publication year.

2 Total item requests, using COUNTER 5 code of practice, journal articles and book chapters.

3 SDG-related articles published since 2015.

4 Journal authors, CSAT score. Proportion of authors rating publishing experience excellent or good.

5 Average cost per download has fallen c.30% since 2019 (books and journals, excluding OA content).

6 Yonder Reputation Credit Score of 782/1,000, the most positive score among industry peer group.

7 Includes IT-related operational spend.

8 Article processing charge (APC).

All figures shown are 2023, except where otherwise stated.

OUR BUSINESS

The desire to discover and understand the world around us starts with our first breath – and never goes away. At Springer Nature we're with you every step of this lifelong journey, using our trusted brands, the talent of our people and advanced technologies to provide verified insights that are easy to find, understand, use and build on.

In the research community, we build deep connections with authors and use the latest innovations to bring global visibility to their work. Through our partnerships with editors, peer reviewers and experts across our vast ecosystem, we evaluate, quality assure, improve and publish new discoveries, big and small. Many of these insights are free to access as we move closer to open

research. This helps researchers make fresh breakthroughs, laying the foundations for the next generation's progress.

In schools across the globe, we inspire curiosity and spark the joy of learning through our textbooks and online materials. We also provide educators with the tools to teach some of the world's most widely spoken languages.

In the workplace, we help put discoveries to use for the benefit of society, through our publications and services that make the latest research accessible and understandable to clinicians, engineers and other professionals. And our prestigious journals and magazines inspire wonder among a wide variety of audiences, from specialists to the general public.

OUR ACQUISITION OF PROTOCOLS.IO

We are the world's leading publisher of protocols – the detailed step-by-step instructions for research methods that enable insights to be verified, built on and reproduced. In July 2023, as part of our commitment to open science, we acquired protocols.io, a secure platform for developing and sharing reproducible research methods. Alongside the platform's offering for hosting protocols, researchers also benefit from the ability to write and share methods within the platform, supporting greater collaboration and enabling more efficient and effective workflows. Following the acquisition, researchers now have the option to make their protocols openly available on the protocols.io platform, as well as publishing them in peer-reviewed publications.

We have four complementary business segments:

RESEARCH

Read more on [page 13](#)



EDUCATION

Read more on [page 19](#)



HEALTH

Read more on [page 20](#)

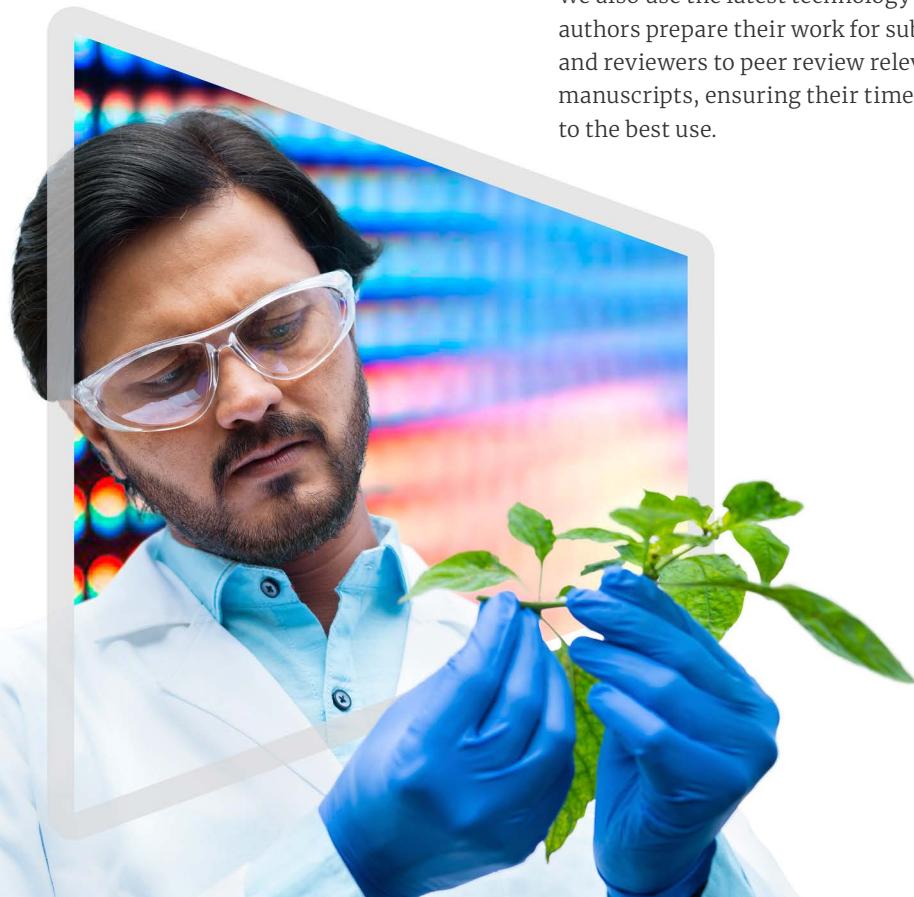


PROFESSIONAL

Read more on [page 21](#)



RESEARCH



Our goal is to be the home for all research. Working closely with the global academic community, we verify, publish and share trustworthy research through a range of established and digital channels. These insights and discoveries support the development of new areas of understanding.

Our academic journals and books cover advances in science, technology, medicine, the humanities and social sciences, and they all play a role in the transition to OA. We also use the latest technology to help authors prepare their work for submission and reviewers to peer review relevant manuscripts, ensuring their time is put to the best use.

OUR JOURNALS

We publish some of the world's most influential journals. Our flagship *Nature* journal has set the standard for publishing scientific breakthroughs since 1869 and continues to provide impact in the academic world and society as a whole. Our portfolio includes *Scientific Reports*, the largest OA journal (by number of articles) in the world.

Most researchers and authors choose to publish in a journal that is the best fit in terms of reach and audience for their paper. With our market-leading range of around 3,000 journals – which includes top-tier OA journals and covers all academic disciplines – and our vast global reach, we are in a strong position to be the home for all research. Through deep relationships with scientists and policymakers, we help to tackle society's most urgent challenges, from climate change to reducing poverty. Around a quarter of the articles we publish relate to understanding and finding solutions to achieve the SDGs.

See how Research performed in 2023
[RESEARCH SEGMENT REVIEW >](#)

TOWARDS INCLUSIVE SCIENCE PUBLISHING

Every year billions of dollars are wasted due to research left in desk drawers or lab notebooks because authors feel it is not worth being published. As the COVID-19 pandemic showed, sharing *all* research – including negative results, small advances and detailed protocols – openly and quickly, can lead to rapid solutions. This gets to the heart of inclusive science: that research can advance discovery in incremental as well as fundamental ways, and that all validated research is important. In the coming years, we'll be launching more journals that will rigorously peer review and validate research without judging its significance.

OUR RESEARCH BRANDS



nature portfolio



Discover

Cureus

OUR BOOKS

We are the world's largest academic book publisher in both scope and scale, with more than 300,000 books available. We provide students, researchers and professionals with in-depth reference material in predominantly digital formats, across all scientific disciplines and in areas of applied research. Every year we publish thousands of new reference works, monographs, textbooks and other book types through our well-known imprints such as Springer, Palgrave Macmillan and Apress.

Our fast-growing range of OA books and chapters generates, on average, more than twice the number of citations, and 10 times more downloads and online mentions than non-OA books. More than a quarter of our books have a focus on one of the SDGs, and we print on demand to reduce waste.

**98 DOWNLOADS
PER SECOND**

OUR PLATFORMS AND SOLUTIONS

In our platform and solutions business unit, we help researchers to connect, collaborate and resolve challenges. Using the latest technology, we support the entire research cycle by providing platforms, products and tools to maximise the speed, quality and reach of their work.

Our platforms for research, including SpringerLink and nature.com, supported 3.1 billion downloads in 2023, an increase of 8% year on year. This is the equivalent of 98 downloads every second – some 8.5 million downloads each day. In research solutions, we offer authors valuable support, from digital editing and translation to preprints, as well as professional development training via [Nature Masterclasses](#). Our data and analytics solutions provide data and insights to researchers, funders, librarians, institutional leaders, and professionals in the life sciences industries to help them make better decisions. Key products include Nature Research Intelligence, AdisInsight, Springer Nature Experiments and SpringerMaterials. Our services, including Nature Careers and Nature Conferences, enable researchers to find the tools, jobs and insight they need to succeed, and help organisations to attract talent, build their reputation and promote their brand.

OUR CONSUMER MEDIA

We communicate the latest research and insights to the wider public through magazines like *Scientific American* and *Spektrum der Wissenschaft*.



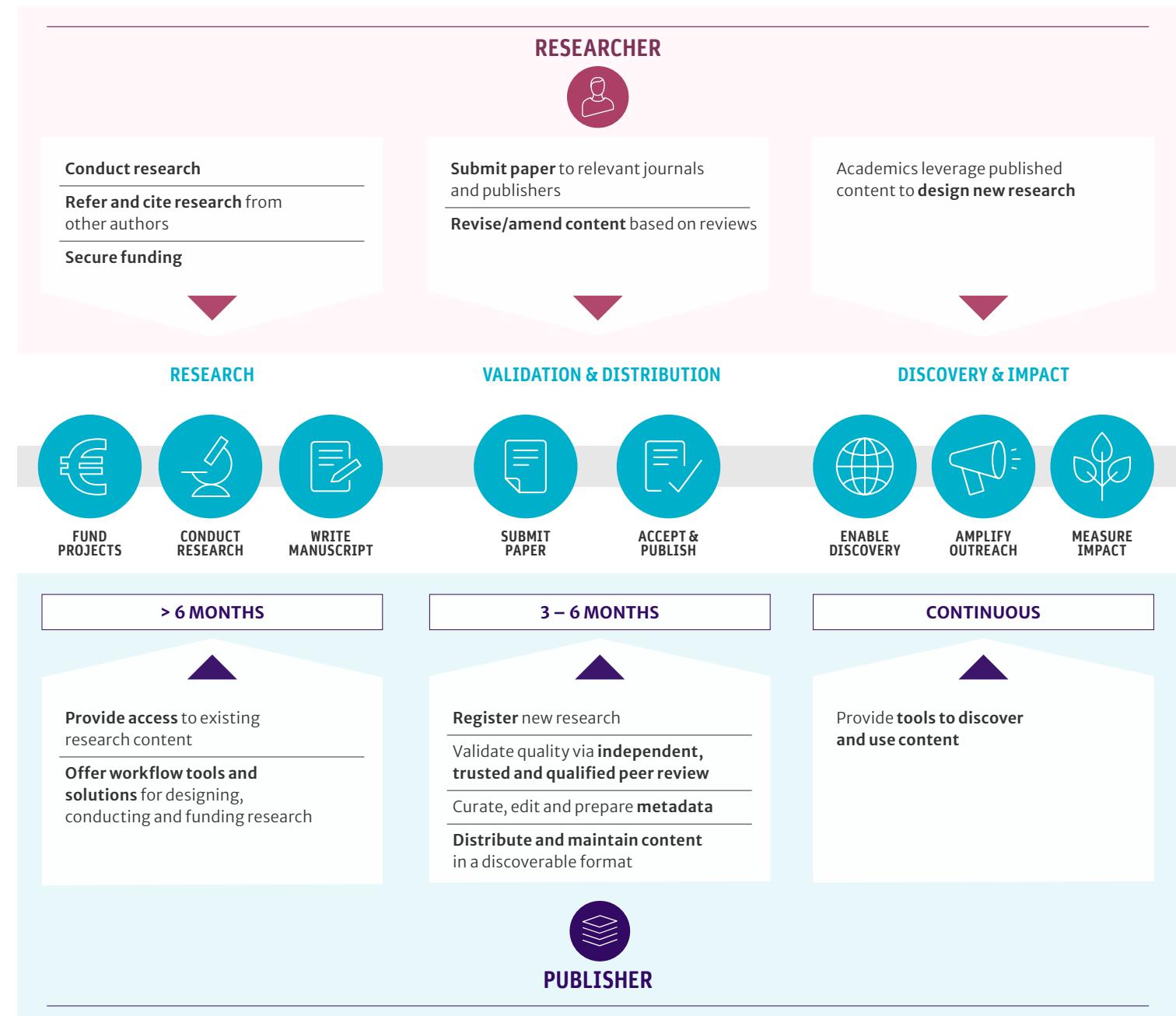
OUR NETWORK IN ACTION

From idea to impact, we support and add value to research throughout the scientific ecosystem. In our role as a leading custodian of quality, trust and integrity in research, we work with more than 174,000 editors and 1.2 million independent peer reviewers who share our commitment to rigour and excellence.

We do our best to find a home for all verified research. If a manuscript doesn't meet the publication criteria for an author's initial choice of journal, our transfer desk will help connect them with editors at some of our other titles that may be more suitable. More than 24,000 papers were published in 2023 after having been transferred to other journals.

Though we still print books and journals, the vast majority of our output is digital, and this is reflected in our revenue, where around 90% of journal revenue and around 70% of books revenues comes from digital (around 80% of overall research revenue).

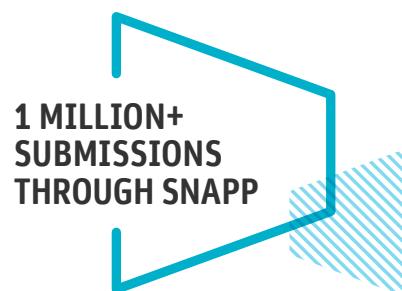
All published research is uploaded to our platforms – SpringerLink, which hosts all our journal and book content, [nature.com](#) and [biomedcentral.com](#) – and tagged with data that makes it simple to discover and share. Increasingly, this content is published OA, immediately available for everyone to read and use. We curate this work, alongside all previously published research, in a vast, dynamic, digital library, ready to be updated as new knowledge emerges or new technology develops.



ACCELERATING DISCOVERY THROUGH TECHNOLOGY

Technology is central to us delivering value to our communities. It is enabling us to accelerate discovery by helping researchers find relevant information more quickly, to promote equity by matching editors with the best peer reviewers globally and to protect integrity by increasing our ability to spot fraudulent papers. Above all, our aim is to make publishing a simpler, faster and more rewarding experience, freeing up time for scientists to do more research.

Innovations in technology have always played a significant role at Springer Nature. It allowed us and other academic publishers to transition from print to digital earlier than other content industries. More than 90% of all our journal content can be accessed digitally, with new online-only journals launched regularly. All our books are available electronically. Technology is also accelerating our transition to OA, through innovations such as our article processing platform, Snapp.



The next wave of progress in publishing is being driven by emerging technologies, in particular generative AI, helping research become more efficient – for example, in climate forecasting, medical diagnostics and protein folding – and researchers more efficient in how they consume research and translate their discoveries into scientific papers. We've been AI pioneers, using it alongside human intervention and supervision for more than 10 years to help the research community (read more on [page 17](#)). It's a key part of our unified discovery platform, SpringerLink, which is taking us from being primarily a content provider to a place where communities can connect to advance our understanding of the world (read more on [page 18](#)).

The most successful research publishers in the coming years will be those that invest in and develop their technology tools and combine them with the expertise of their staff and their wider network of relationships. That's why, as well as building our own technological solutions, we partner with software companies to benefit from their knowledge and to bring innovations to market quickly.



Since 2019, we've been on a journey to transform the publishing process and support growth in OA. At the heart of this is Snapp, the Springer Nature Article Processing Platform, which provides authors, editors and reviewers with a streamlined, simple-to-use experience, from submission to publication. Snapp was developed in-house and in stages, so we can adapt to user feedback as part of its ongoing development. Using AI and machine learning technologies, we are building a publishing system for the future, introducing enhanced integrity checks and integrating tools to smooth the workflow and payment processes.

In December 2023, we reached the milestone of one million submissions through Snapp. In total, Snapp has supported more than 5.6 million authors, and worked with 55,000 editors from 145 countries and more than half a million reviewers. Over a third of journals, and nearly half of our OA journals, are now live on Snapp, with the rest of our portfolio to follow.

IN THE SPOTLIGHT



Our overall objective with AI is very clear: to make people's lives easier by freeing up time and enhancing their productivity and creativity. It's about augmenting human intelligence, not replacing it.

THOMAS SÜTTERLIN
Vice President AI

Combining expertise and ethics to unlock the potential of AI

AI had its breakout year in 2023, with the rapid growth of AI tools for use by the general public sparking debate around the world, from dinner tables to boardrooms. At Springer Nature, we've been successfully using AI – managed carefully with human oversight – for more than a decade. Our AI-based solutions have helped us serve the research community better by making it easier to publish, removing barriers to sharing knowledge and promoting transparency.

We're excited about the potential of this fast-evolving technology to further open up science, but only if used as a means, not an end, to get there. Our responsible approach to AI is always people-centred and focused on the benefits it can offer to the user, whether in the research community or our own organisation. This means that even as we invest significantly in AI, we are proceeding cautiously, creating capacity, confidence and acceptance while considering legal, integrity and reputational risks.

Our dedicated AI team is training colleagues across the organisation to help them understand the technology, so they use it safely to experiment and innovate. To accelerate our AI initiatives, we're building partnerships with expert suppliers. This focus on collaboration has already yielded excellent results. Since 2015, we've worked closely with Slimmer AI, using its advanced software to create solutions to speed up and improve the publishing process.

These tools we've developed together are helping us identify appropriate editors for a manuscript, recommend peer reviewers and safeguard integrity by automating checks for plagiarism. In 2023, we acquired Slimmer AI's Science division to expand our existing in-house expertise.

With the recent advances in AI technology, in particular generative AI, where algorithms can be used to create new content, an awareness of ethics has become ever-more important. We've developed five principles that guide our work when designing, developing, deploying and using AI-based solutions: dignity, respect and minimising harm; fairness and equity; transparency; accountability; and privacy and data governance. To ensure these principles are adhered to, we've created a strict governance process to oversee all stages of innovation, from idea to production.

With these guardrails in place, we've continued to add to our toolbox of AI-powered solutions that are helping advance discovery, promote equity and protect integrity. These include [Springer Nature Research Round-Ups](#), which have provided more than 2,000 auto-generated literature reviews for our authors.



IN THE SPOTLIGHT



A discovery platform with the researcher at the centre

We have a highly compelling offering for the research community: a vast range of leading journals and books, numerous platforms that attract more users than any other publisher, and an ever-growing suite of innovative author solutions. In today's world, however, delivering content and services is not enough – to advance understanding quickly, it all needs to be seamlessly joined up, with the researcher at the centre.

Since 2022, we've been on a mission to better achieve this, reinventing our relationship with researchers by making things more simple, open and connected. With the shift to OA increasing the amount of content freely available, we've been building a unified platform offering world-class search and discovery and a clear path to publication. The platform is designed to meet the demands of all researchers, including early career researchers, who expect superior digital products that allow them to connect with their communities. With AI, we're able to personalise the experience for every user.

Instead of creating from scratch, we built on the success of the existing [SpringerLink](#) platform, which houses the books, journals and other materials published under Springer Nature's brands and imprints. Launched in 2023, the new platform removes the barriers between our Nature journals and Springer content, providing a single home for all our academic research. [SpringerLink](#) will not

replace nature.com but will significantly expand its audience by connecting it to different readers. The platform also provides a much-improved reading experience, with article pages linked to the journals they are published in. The option to directly submit a manuscript is being rolled out. The AI-powered search results and article and book suggestions are driving greater engagement from the 1.8 million registered users.

The platform's homepage was redesigned to respond to authors' needs. The researcher portal enables authors to track the progress of all their manuscripts, and check the impact of their published work, all in one place. We're rolling out a feature on the portal where researchers receive recommendations for funding and on where to publish next, based on their prior work.

Though we have already made rapid progress, much more is to come. In 2024, we're focusing on making it even easier to discover relevant content and to benefit from our solutions. We're also further personalising the experience for researchers across all phases of their work, whether as an author or a peer reviewer or an editor, and helping them build connections, collaborate and grow their reputations in the wider academic community.

EDUCATION



Since 1843, Macmillan Education's pioneering spirit and reputation have helped us build and sustain relationships with educators and governments around the world. As education advances ever faster, we're engaging with our global communities to understand more about teachers' and students' evolving needs, introducing fresh approaches and teaching resources to keep up with the latest technology. We occupy a top three position in most of the markets where we operate.

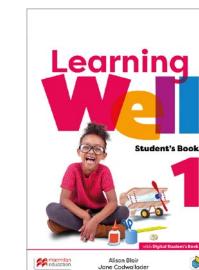
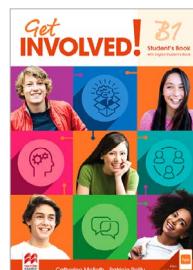
With a diverse footprint spanning more than 120 countries, including a strong local presence in Asia, the Caribbean, Europe, India, the Middle East, Latin America and Southern Africa, we enable over 30 million children each year to develop critical skills and reach their full potential. Our engaging and accessible materials are carefully tailored to meet students' educational needs, whether learning English or within a country's curriculum, across all subjects and in local languages. Created using trusted methodologies and pedagogies, and with support from in-country and global experts, our high-quality print and digital content helps students throughout their learning journeys, including vocational, from kindergarten to grade 12 (K–12). We provide support materials for teachers in English and Spanish, and support and guidance for parents to help their children at home. Teachers also benefit from our professional development and training programmes.

The K–12 curriculums often include English language teaching, enabling students to improve their language skills to help them succeed in education, in the workplace and throughout their lives. Our English literacy and comprehension materials in pre-primary and primary schools help make language learning fun and encourage a love of reading. Gateway to the World, a global course that prepares young adults for university entrance exams, combines new content and digital tools with a widely used and successful methodology. Our Advancing Futures programme helps teachers introduce topics of global citizenship, sustainability and DEI into classrooms. It engages students with crucial elements of the SDGs, empowering them to work towards a better future for all people and the planet.

OUR EDUCATION BRAND



SOME OF OUR PUBLICATIONS



See how Education performed in 2023
[EDUCATION SEGMENT REVIEW >](#)

HEALTH



We've been providing doctors, dentists, nurses and pharmacists with trustworthy insights and solutions for nearly a century. Through our four business units and strong brands, we advance medical knowledge to improve the diagnostics, treatment and care of patients.

With more than 120 journals and periodicals, we lead the market in Germany and in the Netherlands, where we also have an extensive book portfolio. Drawing on our cooperation with more than 200 societies and medical associations, we provide additional services for healthcare professionals. This trusted and expert medical information includes continuing medical education, the latest scientific research and industry news, healthcare policy and practice management.

We also deliver highly relevant clinical and scientific content, strategic medical communications solutions, specialised training programmes and medical education initiatives across the full range of therapeutic areas. Our *Cureus Journal of Medical Science* enables peer-reviewed articles by physicians and medical practitioners – who often don't have access to research grant funds – to be published OA. Cureus has a growing monthly audience of 1.2 million unique readers.

1.2 MILLION UNIQUE READERS OF CUREUS JOURNAL OF MEDICAL SCIENCE EACH MONTH

OUR HEALTH BRANDS

We reach more than 240,000 registered healthcare professionals worldwide through our brands, including:

 Springer Medizin

 Springer Healthcare

 bsl
media & learning

Cureus

See how Health performed in 2023

[HEALTH SEGMENT REVIEW >](#)

PROFESSIONAL

Through our Springer brand, we deliver knowledge and support to enable professionals to reach their potential. We provide tailored information and services for several markets, including engineering and management, in Germany, Austria, Switzerland and internationally.



Our Professional brands include Springer Vieweg, which focuses on content in the areas of technology and applied natural sciences, and Springer Gabler, our imprint for management and business literature. Both German-language brands offer a broad portfolio of products and services including magazines, digital content and events.

OUR PROFESSIONAL BRAND



See how Professional performed in 2023
[PROFESSIONAL SEGMENT REVIEW >](#)

SOME OF OUR PUBLICATIONS



IN THE SPOTLIGHT

Also in this feature

[OPEN ACCESS IN 2023 PAGE 23 >](#)

[OUR OA PORTFOLIO PAGE 24 >](#)

[A BUSINESS MODEL IN TRANSITION PAGE 24 >](#)

[OUR EXPANDING TAs PAGE 25 >](#)

Open access

Breaking down barriers to knowledge

The global pool of knowledge expands fastest and for the widest benefit when science is open: transparent, trustworthy, accessible and available to all to use, reuse and build on. The foundation for this is OA.

At Springer Nature we've been pioneering the shift to OA for more than 20 years and are committed to making primary research immediately and freely available. Thanks to our longstanding and growing portfolio of more than 600 fully OA journals, in 2021 we were the first in our sector to publish more than one million OA articles in total. More people use and read fully OA articles published by Springer Nature than those of other fully OA publishers.

We set ourselves the ambitious goal of having at least half of all our primary research articles published OA by the end of 2024 – and we're on track to achieve that. To accelerate the next phase of the transition to OA, we're investing strongly in technology and AI, with a particular focus on protecting the integrity and trust of research. We are building our OA teams, especially in China and India, to reflect the growth in research output in these countries. We are also working closely with institutions and funders globally to make the transition affordable, simple and scalable. By fully opening up all elements of research, from the underlying methodologies and data to the published article, in a sustainable and equitable way, we can realise the benefits of open science and accelerate solutions to the world's most urgent problems.

OUR OPEN ACCESS FIRSTS

2023

3,500+ institutions globally benefiting from TAs

2021

One millionth OA article published

2015

First transformational publish-and-read deal begins

2011

Scientific Reports launches

2014

Nature Communications becomes fully OA

2005

First fully OA journal

2000

BioMed Central is the first commercial OA publisher

Why OA matters

For researchers and authors, publishing OA significantly increases the visibility and impact of their work and supports career progression. Journal articles published OA are, on average, cited (used by others) 1.6 times more than subscription articles. Books published OA are cited 2.4 times more than non-OA books and have greater international reach, typically being read in 60% more countries than those that are not OA.

For librarians and institutions, OA articles and books have the advantage of far greater use than non-OA content. OA articles are downloaded six times more, and OA books are downloaded 10 times more.

For society and science, OA ensures that the knowledge that can help address global challenges gets into the hands of those who can effect change. That means the world can benefit more quickly from scientific discoveries, as we saw with the COVID-19 vaccine. Openness in publishing also helps increase trust in science.

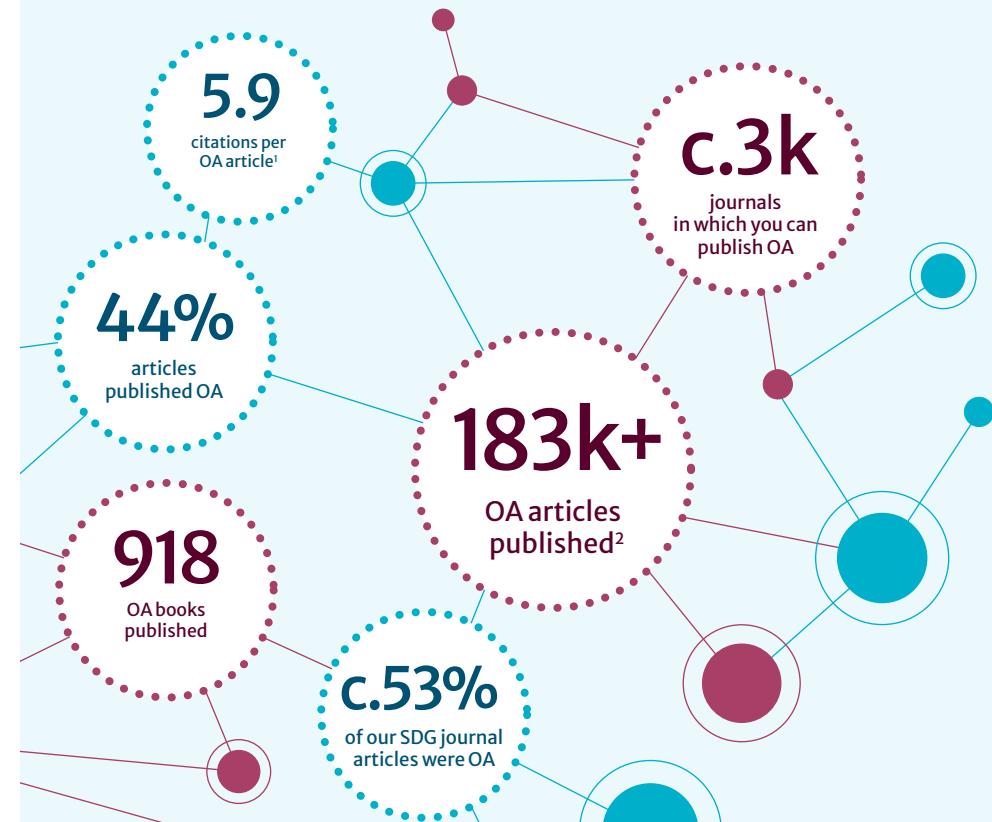
The same high standards

We see similar acceptance rates at portfolio level for our fully OA and Springer hybrid titles. Our expert editors, both in-house and from the wider academic community, and independent peer reviewers, make all decisions about quality. Any other approach would be self-defeating because our reputation for integrity and the high standards set by our brands are our greatest asset. Authors publish with us so that their work can sit alongside other robust, verified research.

In our hybrid journals, which are transitioning towards the fully OA model, authors have the option to publish either OA or through the subscription model.

For researchers and authors, publishing OA significantly increases the visibility and impact of their work.

OPEN ACCESS IN 2023



¹ In fully OA journals. Source: Dimensions, Digital Science. Based on articles published in 2022, with citations in 2022 and 2023.

² 128.2k articles in fully OA journals and 55.6k articles in hybrid journals.

OUR OA PORTFOLIO

As the most comprehensive OA research publisher, we offer the option to publish articles OA in all our journals, across all academic disciplines.

Our fully OA portfolio includes:

- the world's largest fully OA journal, *Scientific Reports*
- more than 600 other fully OA journals across six imprint brands.

After *Scientific Reports*, our leading fully OA journals in 2023 by downloads were *Nature Communications* and *BMC Public Health*. Our fully OA portfolio has the highest number of average citations per article among the top 10 largest publishers in fully OA – 5.9 per article published in 2022 – which is 18% more than our closest mixed-model competitor and 32% more than our closest pure OA competitor.

Our portfolio of hybrid journals includes:

- more than 2,200 journals
- more than 30 Nature research journals.

Transforming access

We've been leading the way with TAs since 2014, and believe they are the best means of delivering a fast, cost-neutral and equitable shift to OA globally and on a large scale. TAs are typically agreed at a country or consortium level and, for a single fee, enable participating institutions to combine journal subscription access along with OA publication costs. This allows their researchers to read subscription articles and to also publish their research immediately OA in our journals, assuming the work meets our standards, at no extra cost to themselves.

TAs are sustainable over the long term because they are negotiated and funded, and can be tailored to suit the needs and priorities of different institutions, consortia and countries. We believe they offer clear advantages to everyone involved in research. For authors, publishing OA becomes a viable option because they don't have to worry about payment. The agreements are discipline neutral, which is especially useful to researchers in areas that typically attract less funding, such as humanities and the social sciences. TAs increase the visibility, reach and impact of an institution's research. They streamline workflows for librarians and research managers by centralising payments, while an easy OA workflow with automated, efficient and reliable author identification reduces administration. Funders appreciate the increased reach and use of researchers' work, while science and research is better off because of the growth in content and a more equitable transition to OA across all academic disciplines.

Our progress in 2023

We had a productive year, broadening our TA geographical footprint with new agreements in the Americas, Europe, Asia and Africa. We now support researchers from more than 3,500 institutions to publish OA. In 2023, we signed our first TA in the Greater China region – the largest there by any publisher. We also signed our first agreements in Southern Africa and South Korea, and significantly expanded our range of TAs in North America. Among others, we renewed our landmark agreement with the DEAL consortium in Germany, which includes around 900 mostly publicly funded academic institutions.

In 2023, the number of active TAs increased by 57%, leading to over 42,000 articles published under 44 agreements. However, there is still some way to go to ensure that researchers from all countries can realise the benefits of publishing in this way. We are working with funders to encourage a wider rollout, but we understand that budgets and policies can make the transition complicated. When countries and institutions are ready to move to a TA, we are there to partner with them. In the meantime, to ensure equity of publication and access, we are experimenting with different models, as well as being flexible in our approach to meet the different needs of researchers in different geographies and disciplines.

A BUSINESS MODEL IN TRANSITION

The shift to OA required a new research publishing business model. Under the traditional 'pay to read' model, the publishers' costs are covered by subscriptions, which grant access to the content in their journals, ebooks and searchable databases. With OA publishing, the user of the research doesn't pay, so the business model is inverted. Under the OA business model, the publishing costs can be met in two main ways. The author, usually through their research funding, pays an individual APC, or, more often, the cost is covered by a TA.

42,000+ ARTICLES
PUBLISHED
UNDER 44 TAs

OUR TRANSFORMATIVE AGREEMENTS SUPPORT AUTHORS FROM MORE THAN 3,500 INSTITUTIONS GLOBALLY

“

OA helps promote social justice by making sure that everyone has access to research, regardless of their personal or institutional funding situation. If your institution has OA agreements with publishers, use them. Maximise your institution's investment in OA by actively participating in OA publishing.

DR ERIC L PIZA

Professor of Criminology & Criminal Justice, Northeastern University



Australia and New Zealand
Austria
Botswana
Canada
Colombia
Cyprus
Czechia

Denmark
Egypt
Finland
Germany
Greece
Hong Kong
Hungary
India

Ireland
Israel
Italy
Japan
Malta
Mexico
Netherlands
Norway

Poland
Portugal
Qatar
Slovakia
Slovenia
South Africa
South Korea
Spain

Sweden
Switzerland
Taiwan
Thailand
Turkey
UK
USA

¹ At time of signing.



OUR PERFORMANCE IN 2023

- 27 Financial review
- 29 Segment reviews
- 33 People
- 36 In the spotlight: India research tour
- 37 Sustainability
- 39 Governance
- 41 Outlook

FINANCIAL REVIEW

We had another successful year in 2023, meeting our goal of realising stable, profitable growth and long-term value for all our stakeholders, in a sustainable way.

Led by our Research and Education segments, we achieved solid financial performance in an uncertain macroeconomic environment, underlining the resilience of our business.

We published record amounts of research, while maintaining our market-leading impact scores and investing to deliver better services and solutions for our customers. In one of our key business areas, OA, we strengthened our position by gaining market share.

We measure our financial performance using two main indicators – revenues and operating profits – and their underlying trends over time. In 2023, revenues saw underlying growth of 5.2%, reaching €1.85 billion. The Research segment delivered strong results, with underlying revenue growth of 2.9%, ahead of the market. Following exceptional performance in 2022, the Education segment did even better in 2023, with increasing sales in all our markets driving 25% underlying revenue growth. Education revenues are now above pre-pandemic levels. In our Health segment, revenues fell by 0.3% in a challenging market.

Adjusted operating profit increased to €511 million, resulting in strong operating cash flow and reinforcing our financial position. We reduced our net financial debt by around €280 million and, as a result, our leverage, enabling us to refinance our debt. Our robust financial performance allowed us to maintain our high investment levels, including €173 million of investment and operating spend on technology and products (read more on page 28). In countries where we do business, we contributed €106 million in corporate income taxes.

Our strong earnings were partially offset by higher costs due to inflation and by the second of our cost-of-living payments, which was provided to more than 6,000 employees below a certain income, in countries that were particularly affected by rising prices.

ACQUISITIONS AND DISPOSALS

We acquired several businesses in 2023, including protocols.io in our Research segment, and Slimmer AI Science division, a technology company that we've worked with for several years. In the Professional segment, we divested our road safety education business.

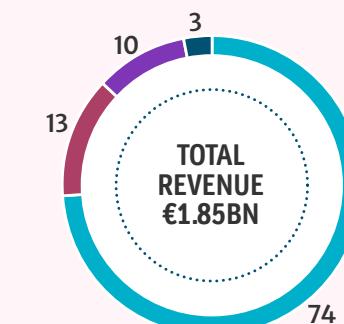
BB

I can't imagine any other place to work right now that is as exciting as Springer Nature, with its focus on research, technology and accelerating discovery, and with so many opportunities to grow.

ALEXANDRA DAMBECK

Chief Financial Officer since January 2024

2023 REVENUE



Segment reviews

[RESEARCH IN 2023 PAGE 29 >](#)

[EDUCATION IN 2023 PAGE 31 >](#)

[HEALTH IN 2023 PAGE 32 >](#)

[PROFESSIONAL IN 2023 PAGE 32 >](#)

REFINANCING OUR DEBT

Our strong financial performance over recent years has helped us to reduce our debt and leverage. In December 2023, we reached a significant milestone, with our lower net debt-to-EBITDA² ratio enabling us to refinance our debt with a group of banks on more attractive terms, including reduced interest payments. This is a clear testament to the quality and resilience of our business. The new financing structure is expected to further support the execution of our strategic goals going forward.

¹ Part of the Professional segment was sold in 2023 (see page 32).

² Net debt includes the carrying amounts of interest-bearing loans and borrowing, lease liabilities and cash. EBITDA is adjusted for exceptional/one-off items and for gains/losses from acquisitions and disposals of businesses.

INVESTING IN TECHNOLOGY

Like many of the scientists whose work we publish, we aim to be pioneering and proactive. That requires high levels of investment, year after year. Our investments in technology, including AI, enable us to deliver better products, services, solutions, publishing processes and other digital capabilities, and to safeguard integrity. In 2023, our financial performance enabled us to increase our technology-related spend, including personnel costs, to more than €173 million, taking our total investment in these areas to over €470 million since 2021.

The main goal is to build a faster, more efficient and more user-friendly publishing workflow, for the benefit of authors, editors, peer reviewers and all those involved in the publishing process. We continued to invest in our publishing platform, Snapp, which now hosts over a third of our around 3,000 journals, including nearly half of our OA journals. We also invested in our new unified discovery platform, which provides a home for our content and allows researchers to track their manuscripts and the impact of their work (read more on page 18).

Many of our new innovations are enabled by AI, and we've added more people to our specialist team, including 24 people who joined following our acquisition of Slimmer AI Science division. We doubled the size of

the research integrity group, whose expertise and innovative tools are helping us detect problematic content and prevent it from being published (read more on page 8).

We're also investing in emerging technologies for internal use, including AI and cloud infrastructure, to boost our capabilities across the organisation, from sales to procurement.

INVESTING IN OUR PEOPLE AND COMMUNITIES

We also invest significantly in our people. In 2023, we delivered more than 60,000 hours of staff training and development. More than 500 colleagues participated in the inaugural year of a new company-wide leadership programme. In Pune, India, where we have nearly 1,500 employees, we moved into a new office designed for post-pandemic working, and will soon relocate to a new office in Heidelberg, Germany. We also made a second cost-of-living payment to more than 6,000 employees working in high-inflation countries.

We expanded our DEI work internally, launching new internships and company-wide training programmes, and externally in our communities, where we commissioned a study of 5,000 researchers to understand how they perceive and experience DEI. Our fully OA journals waived more than €26 million in authors' APCs in 2023.

2023 REVENUE

	2021	2022	2023
TOTAL			
Revenue (€/millions)	1,700.9	1,821.8	1,853.0
Underlying growth ¹	6.5%	5.9%	5.2%
Adjusted operating profit (€/millions) ²	443.4	487.4	511.4
Adjusted operating profit (€/millions), restated ^{2,3}	430.4	461.5	511.4
Underlying growth ¹	7.3%	7.8%	7.1%
Operating margin	26%	27%	28%
Operating margin, restated	25%	25%	28%
RESEARCH			
Revenue (€/millions)	1,223.1	1,312.5	1,368.1
Underlying growth ¹	6.0%	4.1%	2.9%
EDUCATION			
Revenue (€/millions)	183.8	220.3	241.4
Underlying growth ¹	11.0%	24.5%	25.1%
HEALTH			
Revenue (€/millions)	183.4	185.6	188.7
Underlying growth ¹	4.8%	0.3%	-0.3%
PROFESSIONAL			
Revenue (€/millions)	110.5	103.5	54.7
Underlying growth ¹	7.3%	3.8%	-3.3%

¹ Underlying growth rates represent year-on-year growth rates that exclude both the impact of changes in scope of consolidation and also the impact of changes in foreign exchange rates versus our reporting currency (Euro).

² Adjusted operating profit, excluding capital gains and losses and any effects occurring outside the ordinary course of business or non-recurring effects. Such effects may relate to gains and losses from the acquisition or disposal of assets or businesses, the integration of assets or businesses, the restructuring of segments or business units, as well as to other exceptional or non-recurring business transactions or events (adjustments/exceptional items).

³ To better reflect the operational and financial performance of Springer Nature, and the economic substance of the underlying transaction, the following effects have been reflected in the financial results since 2023: foreign exchange-related revaluation of bank balances, foreign exchange-related revaluation of trade intercompany receivables and payables, and realised gains/losses from economic foreign exchange-related hedging activities. The comparative figures for 2021 and 2022 have also been restated.

RESEARCH IN 2023

Our Research segment had another record-breaking year. In a challenging period for the industry, we published more quality research than ever before, including more than 420,000 articles and more than 14,000 books. These insights and knowledge were widely used and shared, with our high rates of downloads, citations and page views showing the value we provide to our authors.

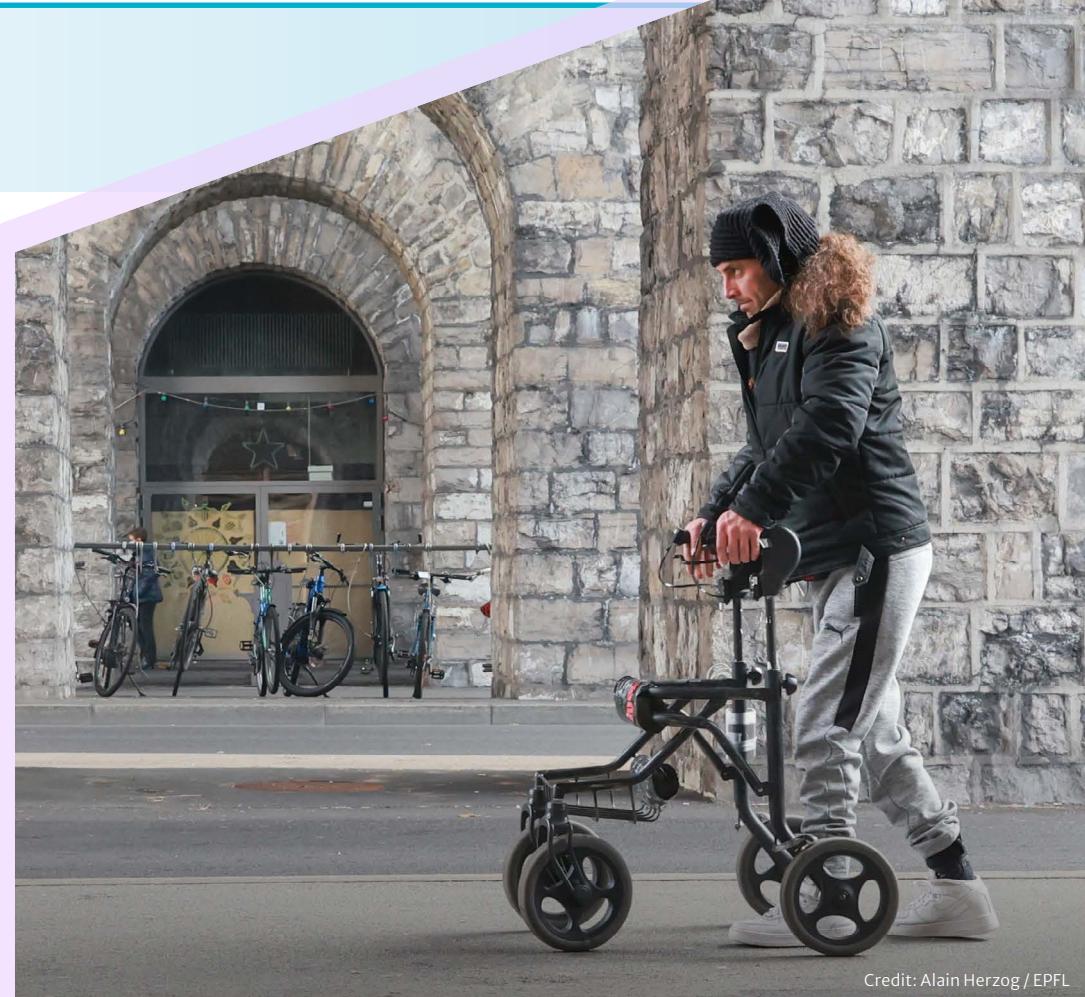
Underlying revenue growth was 2.9%, at the higher end of the market. This was driven by the strong performance from our Nature Portfolio journals, which saw revenue growth of 8%, and our fully OA business.

WE PUBLISHED MORE QUALITY RESEARCH THAN EVER BEFORE

We successfully launched three new Nature titles to meet the needs of the research community – *Nature Mental Health*, *Nature Water* and *Nature Reviews Bioengineering* – proof of the ongoing strength and trust in the brand. Our Nature Portfolio now has 62 journals.

Revenues from our OA journals were boosted by the increased volume of research published. The number of OA articles jumped by nearly a fifth, and represented 44% of our total articles in 2023. With our TAs laying the path for future growth, we are on track for half of the research articles we publish to be OA by the end of 2024. The total number of OA books published also rose sharply, by 42%. The shift from printed to digital formats continued, with around 70% of books revenues generated by digital titles. Print sales declined, continuing the trend from recent years. Overall, revenues for the segment were stable.

We acquired protocols.io, a secure platform for developing and sharing reproducible research methods, strengthening our world-leading protocols offerings.



Credit: Alain Herzog / EPFL

During 2022 and 2023, research was published in *Nature* and *Nature Medicine* on the effectiveness of implants that enable people with spinal cord injury to walk again.



The first few steps were incredible – a dream come true!

A PATIENT INVOLVED IN ONE OF THE STUDIES

BROADENING OUR REACH, PROMOTING EQUITY AND PROTECTING INTEGRITY

We want to provide a home for all research – and we want it to reach the widest possible audience, to help accelerate solutions to the world's problems. Our journal titles cover more subject areas than any other publisher, and an ever-greater amount of our primary research content is free to read.

We also want access to research to be equitable, and we're committed to assisting authors in lower-income countries and in disciplines that are hard to finance. Our fully OA journals waived fees of more than €26 million to authors in 2023, including more than €8.5 million for articles with corresponding authors based in low or lower-middle income countries.

Most importantly, we want to protect integrity and trust in science. Using the latest technology, including AI, our editorial community, supported by our research integrity group, seeks to make sure all work we publish meets the highest editorial standards. In 2023, overall we identified and prevented publication of more than 8,000 submitted papers with major integrity problems and reviewed more than 1,700 other cases related to published

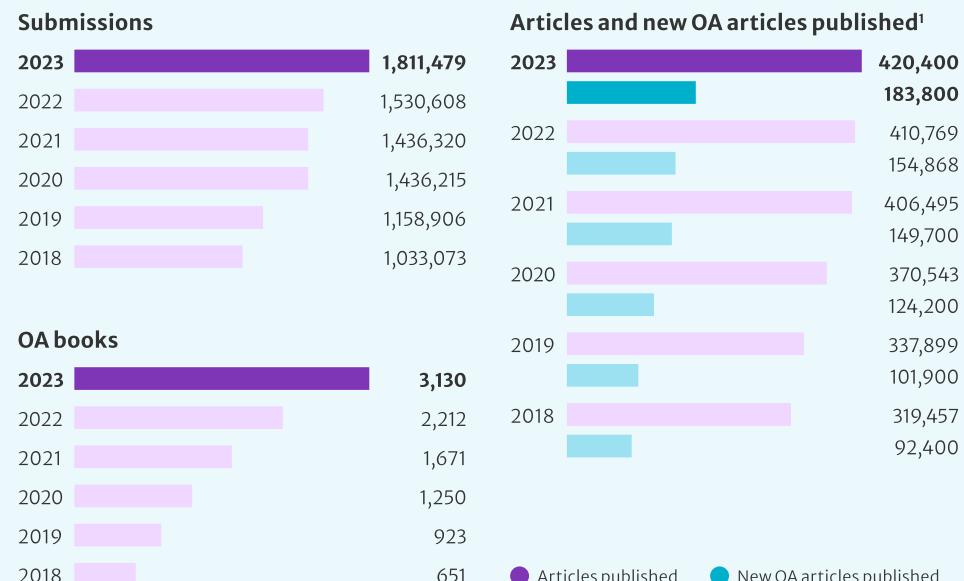
papers. This represented a small proportion of the 1.8 million papers submitted to us. Read more about our work in safeguarding research integrity on [page 8](#).

OUR IMPACT

The research we publish is widely used, shared and built on, enabling the research community to work together to find solutions that will advance discovery and lead to a better world. Downloads and citations have been increasing in recent years. Research publishing saw a big spike in 2020, due to the volume and urgency of pandemic-related research, and a subsequent fall in 2021 and 2022. We have successfully grown our downloads and citations from pre-pandemic levels. These are market leading and demonstrate our commitment to being a trusted partner in science, prioritising quality over quantity.

GROWING OUR SUBMISSIONS, CONTENT AND OPEN ACCESS

In 2023, we saw a sharp rise in submissions. We extended our track record of publishing more articles, in particular OA articles where we gained market share. OA books also grew strongly, and we now have a market-leading position, by volume.



¹ Includes research journal and review article content only, published in fully OA journals (128.2k) or within hybrid journals (55.6k). Excludes editorials and opinion pieces.

DOWNLOADS AND CITATIONS

770 up >20% since 2019 Downloads per article	4.34 up >11% since 2019 Average citations per article	5.9 highest of top 10 publishers, in fully OA journals Average citations per OA article
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EDUCATION IN 2023

In a year marking its 180th anniversary, Macmillan Education not only celebrated a significant milestone but also delivered outstanding performance. With our local businesses around the world meeting their publishing cycles, producing high-quality textbooks and recording strong sales, underlying revenue grew by 25% and is now above pre-pandemic levels.

We saw growth in all our markets, with India, Mexico, Argentina, Southern Africa and the Caribbean leading the way. As was the case in 2022, one-off purchases by governments boosted our school curriculum business, particularly in Latin America.

86 NEW TEXTBOOK SERIES PUBLISHED IN 2023

The biggest driver of growth in 2023 was the open market business, where the purchasing decision is made by a school, an individual academic department or parents. Growing this business area was one of our key goals, and we aim to expand further in the coming years. Cost-management measures helped reduce the impact of higher printing costs and inflation.

We continued to drive the use of digital resources, especially by teachers. Our curriculum and English language teaching content is now available on a single, flexible platform: Macmillan Education Everywhere. We unveiled this platform in our southern hemisphere markets in 2023 and will expand the rollout to our global markets in 2024. We also focused on increasing the accessibility and diversity in our content, and on helping good causes in our communities. To mark our anniversary, we launched '180 days of giving back'. All our employees around the world were given one day of leave to volunteer for a charity supporting education in their region.



GG

I want to express my sincere gratitude to Macmillan's '180 days of giving back' initiative for renovating our pre-school. This will always be memorable for the children because they are now proud to say it's their school and it's beautiful.

GUGU GININDZA

Teacher at Enhlabeni Pre-School

SEGMENT REVIEWS

HEALTH IN 2023

In an uncertain business environment, our Health segment declined by 0.3% in 2023. We saw good growth in our events business, which has recovered to pre-pandemic levels in our main markets of Germany and the Netherlands. Subscriptions again increased, and Adis, a leading global publisher of drug-focused content and solutions, performed well.

Our India operations, which are mainly focused on medical communications, delivered strong results. In Germany we rolled out Medbee, a mobile-first

community platform for doctors, and we also launched springermedicine.com, a pan-European medical education platform.

As in 2022, overall customer spending was cautious due to the challenging macroeconomic situation and the impact on pharmaceutical companies of logistics issues and new legislation in Germany. While we expect these challenges to persist in 2024, we will continue to focus on our digital transformation programmes that allow us to expand our advertising reach.



SEGMENT REVIEWS

PROFESSIONAL IN 2023

The Professional segment had a challenging year. With the global supply chain crisis affecting profit margins, automotive and engineering companies cut back on marketing spending, reducing our revenues from advertising.

We are confident of a return to growth in 2024, boosted by our events and congress business.

Our road safety education business was acquired by the Swiss asset management company Unigestion in the second quarter of 2023.

PEOPLE

Working at Springer Nature means being part of progress. Every day, our 9,400 talented, curious people in 40+ countries make a positive impact by helping researchers, clinicians and educators find solutions to the world's biggest challenges.

We provide the nurturing, innovative environment for our people to do purposeful and rewarding work. And we encourage and support them to reach their full potential so they can enjoy fulfilling, enduring careers. This approach is captured in the promise we make our people: with us, you can **stretch your horizons, develop your curiosity and be yourself**.

To ensure we're delivering on these promises, we listen closely to our colleagues through our employee forums and annual employee engagement surveys. The feedback and insights help shape future initiatives and identify areas that need to be addressed.



Engaging our people

In 2023, 74% of our colleagues took part in our employee engagement survey, sharing more than 8,000 comments. The score for the main question, 'How happy are you working at Springer Nature?', increased again, by one point, to 74. The score for the question 'I would recommend Springer Nature as a great place to work' rose two points to 75. Other scores remained stable or saw positive changes. Our engagement efforts in recent years contributed to us being recognised in early 2024 as a Leading Employer in Germany, the UK and the US. The award is based on an independent study of company qualities, from employee satisfaction to reputation, and is given to the top 1% of employers.

Supporting wellbeing

We prioritise wellbeing and promote good mental health by making guidance and resources available to all our people. Our 24/7 global employee assistance programme offers short-term counselling as well as information and resources on emotional, financial, legal and work-life issues.

BUILDING A GREAT PLACE TO WORK

Employee satisfaction score

2023	74
2022	73
2021	71

75

Score for question
*'I would recommend Springer
Nature as a great place to work'*

+2

Since 2022

**AROUND 9,400
EMPLOYEES IN
40+ COUNTRIES**





A LEADING GLOBAL EMPLOYER



STRETCH
YOUR
HORIZONS

We want all our employees to be able to enjoy working for an ambitious, global business that wants our talented people to do well.

In 2023, in response to feedback from the employee engagement survey, we focused on career opportunities. We made internal vacancies more transparent and created a new career hub, bringing together resources, training and events, to enable people to take ownership of their professional development. As part of our new SN Leader Programme, which aims to build a shared leadership community and culture across our business, 500 people spent time developing and practising approaches on topics such as leading hybrid teams and values-based leadership.



DEVELOP
YOUR
CURIOSITY

Our people work alongside smart, inspiring colleagues in a collaborative and innovative environment that celebrates intellectual curiosity.

To encourage continual learning, we recommended all our people use five days a year for training and development, including online and in-person courses, as well as on-the-job training and mentoring. In 2023, we delivered more than 60,000 hours of online employee training. To promote and reward curiosity, we hold an annual Springer Nature Innovation Tournament. In 2023, this internal competition had 80 submissions, nearly double the number in 2022. The winning entry was a tool enabling editors to quickly create engaging social media posts to increase the impact of published content.



BE
YOURSELF

We want everyone at Springer Nature to make a positive impact in an open, welcoming and supportive culture that enables them to fully participate and perform at their best.

Our workation programme allows colleagues to work remotely from another location and combine it with a holiday or a visit to see family or friends. In 2023, the first full year of the programme, 723 people took workations, in 76 countries.

Our employee networks have more than 1,800 members and unite colleagues who share an identity or, like our Green Office Network, are working towards the same goal. This year we added our 10th network, SN Muslims.

DIVERSITY, EQUITY AND INCLUSION

People perform at their best when they can be themselves – feeling valued, respected and that their voice is heard. We believe that a diverse, equitable and inclusive environment creates the conditions for this to happen, empowering people and helping them achieve their potential. As a global publisher, we also have a deep commitment to push for positive change in the communities we serve and through our content.

Building an inclusive workplace

To help us better understand our colleagues' experiences, we hold an annual global inclusion and diversity survey. Our 2023 survey was completed by 59% of our global workforce, up from 53% in 2022. Scores for inclusion questions remain favourable and stable, and mostly at or above benchmark levels.

Women made up 44% of our global leadership cohort at the end of 2023. In 2018, 39% of our global leaders (those in the top three tiers of the organisation) were women. We set a goal to reach 45% by the end of 2023. We're proud to have seen a significant increase of five

percentage points in gender representation in this group over the period covered by the goal. The increase is largely driven by internal promotions and reporting-line changes, and we're pleased that our investment in talent has led to greater opportunities for women to grow their careers into senior leadership positions. This is also reflected in our Management Board, which, as of January 2024, is now 50% female.

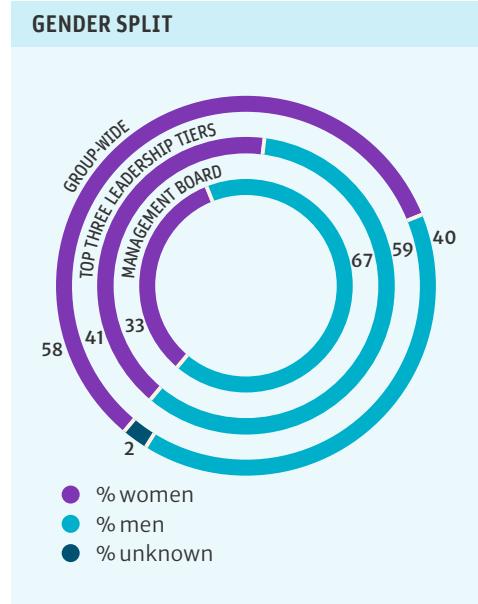
We have also set aspirational global representation goals for race and ethnicity in senior leadership roles, as well as goals to make sure our senior leaders reflect our global footprint. You can learn more about these goals on our [website](#).

In 2023, we launched the Opening Doors internship programme, a paid opportunity for students and recent graduates from historically underrepresented groups to gain experience in research and science publishing. We expanded our DEI mentoring programme for people from groups that experience lower levels of inclusion or are currently underrepresented in leadership at Springer Nature. Also new in 2023, the DEI Learning Journey is a comprehensive training programme for all colleagues.

Inspiring positive change

In 2023, we commissioned a study of 5,000 researchers to understand how the research community perceives and experiences DEI. While this survey revealed discouraging findings about the state of inclusion and safety within research, it highlighted an opportunity for us to help improve research and publishing culture. With this in mind, we set up a DEI resource hub to inform, inspire and support our editorial community in developing inclusive publishing practices. This includes two new, complementary resources: an Inclusive Language Guide and a Sensitivity Reading Guide. We also set out an intentional content strategy for books-acquisition editorial staff to explore how content portfolios can be adjusted to influence inclusion and representation more positively.

Our Education segment has created a DEI strategy, focused on five key priorities, which include our Inclusive Publishing Principles. These ensure all students can achieve their potential using our learning resources, and that teachers are supported to meet the needs of students within an inclusive environment.



IN THE SPOTLIGHT



Engaging research communities in India

India is a very important country for Springer Nature – and for science. Not only do we have nearly 1,800 colleagues working there across different locations, India also produces vast amounts of research. In 2023, in collaboration with India's Ministry of Education, we organised a 22-day journey across the country by bus to support and deepen our engagement with research communities there.

Led by our MD in India, Venkatesh Sarvasiddhi, the India Research Tour hosted 15 summits in 14 different cities across 10 states, helping us understand more about researchers' needs and how we can better serve them. After a big launch event, which was titled The Future of Research: Access, Diversity, Ethics and Technology, we held our first summit at the Delhi School of Economics. More than three weeks later, the journey finished at the Institute of Minerals and Materials Technology, in Bhubaneswar, Odisha.

Besides workshops, talks and panel discussions, the summits provided an opportunity for academics, students and people from the wider scientific communities to connect and exchange ideas. We also launched the Her Research, Our Future campaign. It aims to highlight and empower women researchers making a difference, to motivate the next generation of women scientists and to foster connections across the research community. We have continued this campaign in 2024, with a new set of awards for early career women researchers in India.

SUSTAINABILITY

Our people share a passion for making a positive difference to the world. By publishing trusted research and analysis, we build understanding of the greatest societal challenges, and bring to light insights and ideas.

We also strongly believe in doing things the right way, taking responsibility for driving sustainable progress and taking action to protect the planet for future generations.

104K SDG ARTICLES
OR BOOKS PUBLISHED
IN 2023

ACCELERATING SOLUTIONS TO THE WORLD'S MOST PRESSING PROBLEMS

Nearly one in four of our employees is now actively involved in sustainability issues. This includes members of our employee networks, including our Green Office Network, which doubled in size in 2023 to more than 400 active members. It also includes colleagues who volunteer across 17 working groups on projects to advance the SDGs. Launched in 2015, the SDGs are a call to action to help solve some of the world's most pressing problems, from poverty to climate change and inequality, by 2030. We are now at the half-way point and, despite concerns about meeting the goals on time, we're intensifying our efforts to amplify the SDGs through our published content. In eight years, we've published more than 940,000 pieces of SDG research, which were collectively cited more than 13 million times. Around 53% of this content is OA, meaning it is immediately available to those who need it to advance the goals.



Read more about our sustainability strategy and progress in our [SUSTAINABLE BUSINESS REPORT >](#)



THE ROAD TO NET ZERO

As a leading publisher of climate research, we follow the science. We've been carbon neutral for our offices, warehouses, fleet and flights since 2020, powered by increased renewable electricity, energy efficiencies and offsets. In 2023, the Science Based Targets initiative validated our emissions reductions targets, shown in the graphic.



EMISSIONS REDUCTIONS TARGETS

	Near-term target (2032)	Net zero target (2040)
Scope 1 and 2 Includes: On-site fuel and electricity Fleet	Reduce absolute scope 1 and 2 GHG emissions by 54.6%	Reduce absolute scope 1 and 2 GHG emissions by 90%
Scope 3 GHG Protocol categories 1–15	Reduce absolute scope 3 GHG emissions ¹ by 32.5%	Reduce absolute scope 3 GHG emissions by 90%

Baseline year: 2019

¹ Categories covered are purchased goods and services, capital goods, fuel- and energy-related activities, upstream transportation and distribution, waste generated in operations, business travel and upstream leased assets.

Our science-based targets lay out a roadmap for ambitious near-term emissions reductions. These align with the scientific consensus that rapid emissions reductions are necessary to avoid the worst effects of climate change. Using data to guide us, we're carefully monitoring our emissions trends and taking action to ensure we remain on track to achieve our targets.

At the end of 2023, net emissions from our buildings, fleet and flights were down 39% compared with 2019 levels. This was mainly due to sustained reductions in office emissions. In 2023, our renewable and clean electricity use in our buildings reached 99% for the first time, while our buildings' total energy use decreased by 11%. Our business

flight emissions are also down by a third since 2019. As expected, travel increased in 2023, but we've taken steps to limit further rises. As in previous years, we offset our net carbon footprint from our direct emissions. Offsets are made through carefully selected forestry projects, working with CommuniTree, the largest reforestation initiative in Nicaragua, certified by Plan Vivo, which enables farmers to reforest land with native trees to create sustainable income opportunities.

We've also continued to make progress in reducing our other environmental impacts. Since 2019, we've cut our water use by 55%, our office paper use by 77% and our office waste by 49%.

99% RENEWABLE AND CLEAN ENERGY USE IN OUR BUILDINGS

COMMUNICATING SCIENCE TO A WIDER AUDIENCE

By publishing and disseminating trusted research through our channels and platforms, we help combat misinformation and ensure accurate understanding of the latest discoveries. While we reach millions of people every day, through our websites, social media presence and news coverage, we're constantly looking for ways to make our content even more accessible. In 2023, *Scientific American* launched the Science, Quickly podcast, which was downloaded more than 9.9 million times. We also grew our award-winning Science Stories, which included a short film on research into women's sport from authors including Leah Williamson, captain of the England women's national football team.

GOVERNANCE

MANAGING OUR BUSINESS RESPONSIBLY

Springer Nature has a long history, over nearly two centuries, but our modern business has been formed through a series of mergers and acquisitions. Though we have numerous global brands and business segments, what has become more obvious in the past nine years is what we have in common – a strong, purpose-driven culture that can be seen in everything we do.

The principles of responsible governance, compliance with laws and ethical business conduct are embedded throughout our organisation.

We are committed to:

- operating ethically and responsibly, demonstrating transparent and effective corporate governance
- sound operational and financial management to promote the long-term interests of our company and stakeholders
- compliance with legal and regulatory requirements.

Our commitments are set out in our [Code of Conduct](#) and [Business Partner Code of Conduct](#).

GOVERNANCE STRUCTURE

Our General Counsel oversees our governance processes with the support of our Chief Risk and Compliance Officer and our Group Company Secretary.

Springer Nature is organised as a German partnership limited by shares, a hybrid form of German stock corporation. Corporate governance follows the principle of co-control exercised by the shareholders:

- Holtzbrinck Publishing Group, a family-owned company based in Stuttgart (53%)
- BC Partners, a British investment company (47%).

We have a two-tier board structure, with members who are ideally placed to promote the long-term success of the company:

- The Management Board manages Springer Nature. It has six members, all highly experienced and with a proven track record of leading innovation, growing scaling businesses, expanding distribution and managing global operations. The Management Board is led by Frank Vrancken Peeters, Chief Executive Officer.

- The Supervisory Board oversees the management of Springer Nature. It has eight members, including three independent members, with a wide range of skills and experience. The Supervisory Board is elected by the general meeting for a term of four years, and is led by our Chair, Stefan von Holtzbrinck.

For more information, go to

[SPRINGER NATURE GROUP ABOUT US >](#)



We are a purpose-driven company and our governance structures are based on principled leadership.

RACHEL JACOBS
General Counsel

COMMITTEES

The Supervisory Board has an Audit Committee, which monitors the accounting process, the effectiveness of the internal control, risk management and internal audit systems, the audit of the annual financial statements and other services, and compliance.

COMPLIANCE, RISK AND INTERNAL AUDIT

Our company-wide compliance system is designed to identify and proactively address the relevant legal and regulatory risks. It covers seven core areas: corporate culture, risk assessment, policies and procedures, training and communication, a route for enquiries and issues, due diligence, and monitoring and investigation.

The Chief Risk and Compliance Officer is responsible for internal governance, the risk assessment and management system, design of the compliance system and, from 2023, AI ethics and policy governance. The compliance system is supported by a global network of senior managers responsible for implementing our risk management and compliance processes.

SPRINGER NATURE AI PRINCIPLES

Human-centred values



Dignity, respect and minimising harm

We prioritise human wellbeing and dignity, and take steps to prevent harm to society and the environment.



Fairness and equity

We mitigate the potential for structural bias and inequities.



Transparency

We disclose when an AI system is being used and explain our processes in accessible language.



Accountability

We maintain human oversight of the development and outcomes generated by our AI tools and solutions.



Privacy and data governance

We safeguard personal privacy and follow all relevant data protection laws.

The governance, risk and compliance (GRC) function works closely with the internal audit team, which acts as an independent and objective assurance and consulting entity. The internal audit team supports the organisation through a structured process to evaluate the effectiveness of governance, risk management and control processes.

To ensure independence, the internal audit team reports to the Audit Committee, with a functional reporting line to the Chief Financial Officer. The GRC function reports in the same way, with a functional reporting line to the General Counsel. The Chief Financial Officer and General Counsel sit on the Management Board.

GOVERNANCE IN ACTION

We have established an AI governance framework that includes representation from legal, policy, ethics, technology and commercial stakeholders. We are working with all parts of the business to establish processes for implementing our AI principles, whether we are buying, building or partnering with third parties in creating AI tools and services.

At every stage of developing and implementing our AI solutions, we work to prevent the potential for discrimination and harm. We also align how we use AI with Springer Nature's approach to DEI: recognising and challenging structural inequities and mitigating their effects. We have established an internal AI ethics and safety committee, and have defined standards and principles to govern the responsible and sustainable use of AI in scientific publishing.

Springer Nature's Management Board establishes the rules for ethical decision making in our business units. Our policies are supplemented by management guidance documents. We also issue policies and guidance to third parties based on guidelines and best practice recommendations such as the Committee on Publication Ethics (COPE), UN Global Compact and the OECD Guidelines for Multinational Enterprises.

Our Editors' Information Guide and Journal Editors' Code of Conduct guide the actions of our external academic editors who evaluate content published in our journals. Our publishing and editorial policies were developed in consultation with the research communities that we serve, including authors and librarians, and are rooted in our belief that scholarly communication is aided by greater transparency of our operating processes.

Our research integrity group advises our editors, reviewers and authors on best practice and ethical conduct in research. We provide training for internal editors and resources for external editors on the fundamentals of publication best practice, and on how to resolve research integrity problems when they arise (see more on page 8).

Our Business Partner Code of Conduct helps our business partners understand what we expect of them. Compliance with the Code is included in their contractual obligations, and we regularly audit our key suppliers.

OUTLOOK

We are confident about our prospects in 2024. In the first few months of the year, we have seen a strong increase in the number of article submissions.

Besides publishing more journal articles and books, we aim to keep expanding our journal portfolio, as well as increasing our range of services to the research community, and the education, health and professional sectors. This will enable us to grow our revenues, while increasing our investments in technology and our people.

Our priorities for the coming year include:

- maintaining our strong focus on OA publishing for the benefits it provides to our authors and wider society
- exploring opportunities afforded by emerging technology, especially AI, to increase the range of solutions we can offer our authors and customers and to support the advancement of open science
- increasing our presence in two of our fastest growing markets, India and China, to support research communities there
- building on our strong research integrity foundations to preserve trust in science
- continuing to digitise our product portfolio, to increase features and value for customers, to lessen reliance on printed products and, in turn, to support our ambitions to lower the carbon footprint of our operations
- supporting authors who are publishing research related to the SDGs
- ensuring that Springer Nature remains a great place to work and thrive.



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