

Twenty years of *Nature Reviews Microbiology*



Marking 20 years of *Nature Reviews Microbiology*, we reflect on the increasing importance of microbiology in our ever-changing world.

“Today, microbiology and microbiologists are in the spotlight like never before.” As we penned these words 20 years ago in the first Editorial of *Nature Reviews Microbiology*, we acknowledged the profound influence that microbiology has on our lives and the health of the planet¹. Today, these words resonate even stronger, highlighting how crucial microbiology has become in our ever-changing world. Faced with the colossal challenges that have defined our times – the escalating climate crisis, the COVID-19 pandemic, the looming threat of zoonotic diseases, the imperative for sustainable solutions, and the antimicrobial resistance (AMR) global health emergency – the centrality of microbiology has become unarguably clear. This vibrant, evolving discipline will help guide us as we navigate these complex challenges, making it an exciting time to be in this field.

As we celebrate two decades of *Nature Reviews Microbiology*, we pay tribute to the incredible progress that has brought microbiology to the forefront of scientific exploration. Published this month, our [20th Anniversary Collection](#) includes Reviews from our archive that highlight some of the major developments in the field. From revolutionizing our understanding of microbial communities in hosts and environments to pioneering innovative strategies to combat AMR, microbiology research has brought about considerable transformations. Microbial CRISPR–Cas systems have revolutionized biomedical research, and the pivotal role of microbiology in tackling the COVID-19 pandemic cannot be overstated. Technological advances in genomics and structural biology have had a huge impact on our understanding of the intricacies of the microbial world. This small sample of advances underscores microbiology’s crucial role in understanding the complexities of life and driving progress. Microbiology research guides global health initiatives and powers technological breakthroughs. The field has not only come into the spotlight but has earned its place at the forefront of scientific discovery.

In this special anniversary issue, we present four Reviews that epitomize the vastness and impact of microbiology. First, [Singh and colleagues](#) explore the relationship between climate change and plant pathogens, and the critical implications for food security and environmental sustainability. We then pivot to a Review by [Deeks and colleagues](#) that reflects on the astounding strides made in HIV prevention, treatment and cure since the launch of the journal in 2003, providing an all-encompassing view of this evolving landscape, marked by transformative successes and persistent

hurdles. [Martínez, Hernando-Amado and colleagues](#) continue by examining the potential of eco-evolutionary insights to guide the design of rational, evolution-based and ecology-based antibiotic therapies, highlighting the remarkable potential of microbiology to confront AMR. Last, [Georjon and Bernheim](#) journey into the captivating diversity and evolution of bacterial antiphage defence systems, showcasing how recent discoveries have unearthed incredible evolutionary innovation with wide-ranging implications.

This issue coincides with the Sustainable Development Goal (SDG) Summit 2023, where heads of state and government will gather at the United Nations Headquarters in New York, United States, to review the implementation of the 2030 Agenda for Sustainable Development and progress to achieving its 17 goals, which span from eradicating hunger to climate action. Microbiology research has a pivotal role in meeting the SDGs. Microbiology can help us combat hunger by improving crop yields, ensure public health by preventing infectious diseases, provide sustainable energy through biofuels and even mitigate climate change. To delve deeper into these connections, we present three [Comment articles](#) that discuss progress, challenges and opportunities of microbiology research in working towards the SDGs.

As part of our anniversary celebration, we are thrilled to launch a new Journal Club series, in which our community will revisit historical papers with the intention of highlighting research that holds special importance to the field or to the author. In this issue, we publish the [first pieces](#) in the series, covering a fascinating array of microbiology topics. We hope these pieces will inform, inspire and perhaps rekindle a sense of wonder at the discoveries of the past.

Last but not least, the editors wish to extend a heartfelt thank you to the microbiology community – our authors, readers and peer reviewers – and everyone who has contributed to our journal’s success. Your tireless effort, insight and enthusiasm have made the journal what it is today. As we look to the future, we affirm our commitment to increasing diversity in our pages among those who write and peer review for the journal.

Here’s to two decades of discovery and progress. Here’s to the countless minds who have striven, and continue to strive, to unravel the mysteries of the microbial world. Here’s to the power of microbiology, which helps to forge our path forward as we face the challenges of today and the future. Here’s to the next 20 years. Happy twentieth anniversary!

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References

1. A new beginning.... *Nat. Rev. Microbiol.* 1, 3 (2003).