

Message from the New Editor-in-Chief

Xiaoming Shi

Deputy Director, Chinese Center for Disease Control and Prevention



In this era, filled with challenges and opportunities, we pay tribute to the illustrious history of our esteemed journal, *Biomedical and Environmental Sciences (BES)*, since its inception. In 1988, amid rapid socioeconomic development, China was taking nascent steps towards reform and opening-up with a heightened emphasis on environmental health hazards and increasing frequency of international academic exchanges. Against this backdrop, Professor Chunming Chen, the inaugural president of the Chinese Academy of Preventive Medicine (CAPM), and Professor Frederick Coulston, a renowned American toxicologist, collaborated to establish this journal, with its editorial office at the headquarters of CAPM. Professor Chen's original aspiration and the context surrounding the foundation of the journal demonstrate that *BES* was not only a testament to her boundless love for scientific exploration, but also the realization of her profound foresight with far-reaching implications for public health. The establishment of *BES* aimed to promote the reporting of Chinese research results based on international peer-review and to facilitate academic exchanges within the fields of biomedical and environmental sciences both domestically and internationally^[1]. By pooling the wisdom and expertise of leading experts from various disciplines, including public health, clinical medicine, environmental science, and engineering professionals, alongside editorial board members, reviewers, authors, and editorial staff, *BES* has garnered a solid reputation within the academic community since its inception and has gradually evolved into an internationally influential academic journal within the fields of preventive medicine and public health in China, providing an indispensable platform for communication.

Following its establishment as a quarterly journal in 1988, *BES* evolved into a bimonthly journal in 2005 and finally transitioned into a monthly journal in 2013, showcasing its steady and progressive development and enterprising spirit through its continuous pursuit of knowledge as well as its unremitting efforts and commitment to advancing scientific contributions. In the early days, Professor Chen personally donated \$30,000 during a critical period when the editorial office encountered obstacles, ensuring its continued operation. This selfless act not only demonstrated Professor Chen's profound devotion to scientific endeavors but also injected new vitality into the development of *BES*. Under Professor Chen's leadership (1988–2018), *BES* has consistently focused on health issues stemming from biological, nutritional, environmental, ecological, and physicochemical factors. It has particularly published a series of timely articles reflecting the progress of applied research in public health in China. For example, findings on the optimal cut-off points for body mass index (BMI) and waist circumference among Chinese adults (2002)^[2], and the publication of the "The Guidelines for Prevention and Control of Overweight and Obesity in Chinese Adults" by the former Ministry of Health (2004)^[3], have garnered widespread international attention. In addition, after the 2008 melamine incident in China, *BES* promptly organized five articles reporting on-site investigation results and laboratory testing data (2009)^[4-8]. Subsequently, the impact factor of *BES* increased, reflecting the international attention to this event.

In the past five years, under the leadership of Professor Wenhua Zhao, the Editor-in-Chief who succeeded Prof. Chen, Chief Expert in Nutrition of the Chinese Center for Disease Control and Prevention (China CDC) and Professor at the National Institute for Nutrition and Health, the journal has focused on the frontier research fields of preventive medicine, hygiene, and basic medicine, with an emphasis on nutrition, chronic diseases, and infectious disease prevention and control. It has published numerous influential articles. For instance, based on the "Chinese Nutrition and Health Surveillance (2002, 2010–2012)" and "China Adult Chronic Disease and Nutrition Surveillance (2015)" projects, the article "Trends in Lipids Level and Dyslipidemia among Chinese Adults, 2002–2015" was published in 2019^[9,10]. Additionally, the Writing Committee for the Report on Cardiovascular Health and Diseases in China published "Report on Cardiovascular Health and Diseases in China

2021: An Updated Summary”(2022)^[11]. These articles provide detailed information on the lipid profile and changes in the Chinese population, as well as important insights into cardiovascular and metabolic diseases for healthcare managers and professionals both domestically and internationally. In the annual assessment of *the Academic Abstracts Database*, their impact ranks in the top 0.1% of relevant disciplinary fields.

BES has gradually gained international recognition in the field of scientific journals. Since its founding in 1988, it has been progressively included in prestigiously international retrieval systems or full-text databases, such as Science Citation Index (SCI), MEDLINE, and Chemical Abstracts (CA), which facilitated the widespread dissemination and increasing citation of *BES* publications. The journal’s impact factor, calculated by Clarivate, has shown a consistent upward trend since its inception. The journal’s first impact factor was 0.421 in 1998, which increased to 1.063 in 2010, 2.204 in 2016, and 3.0 in 2023. According to the Journal Citation Reports (*JCR*), *BES* is categorized in the Second Quartile (Q2, 114/403) in the fields of Public, Environmental and Occupational Health. As an English-language journal sponsored by China CDC, *BES* has received extensive domestic acclaim. Since 2013, *BES* has been consecutively lauded as “China’s Most Internationally Influential Academic Journal” by various entities, including the China Scientometrics and Biometrics Research Center. In 2019, *BES* received support from the “Excellent Action Plan for Chinese Scientific and Technological Journals” issued by the China Association for Science and Technology.

BES is committed to implementing national strategies that promote the harmonious development of health and the environment, and to continuously advancing the depth, innovation, and creativity of the research system. For instance, *BES* is continuously refining research frameworks in support of the “Healthy China Strategy”, which places a strong emphasis on the well-being of Chinese individuals and serves as a foundation for constructing a prosperous society. Moreover, *BES* has adopted the “Dual-Carbon Strategy” to address global climate change, which advocates for eco-friendly and low-carbon developments to support economic transformation and safeguard public health. This approach is a focused effort to address prominent resource and environmental constraints and an inevitable choice for achieving the sustainable development of the Chinese nation. *BES* will continue to uphold the principle and concept of putting people’s health at the center of its publication mission. It will consistently monitor the research trends and developments among these key areas, collaborate with global public health researchers, and jointly address major challenges, such as emerging and reemerging infectious diseases, the prevention and management of major chronic noncommunicable diseases, and the impact of climate change on human health. *BES* will also leverage the advantages of multidisciplinary integration, comprehensively interpret and deeply contemplate from different professional perspectives, and provide innovative solutions to achieve a “Healthy China, Beautiful China” and promote Chinese public health to unprecedented heights.

We are currently witnessing a new era of rapid progress in medicine, science, and technology, which presents new opportunities for the development of *BES*. Traditional public health issues, such as food and drug safety, the burden of chronic diseases, and an aging population, as well as new challenges, such as climate change, emerging pollutants, Disease X, and antimicrobial resistance, can be addressed effectively with the continuous breakthroughs in cutting-edge theories and technologies. For example, in the field of biomedicine, progress in various disciplines, such as systems biology, artificial intelligence (AI), and precision medicine, alongside innovative technologies, such as spatial omics, ultra-high-resolution mass spectrometry, high-throughput screening, and machine learning, has enhanced our understanding of biomedical and environmental sciences. In environmental health, the use of advanced technologies, such as earth system modeling, remote sensing, exposomics, and big data analysis, has significantly improved our ability to address emerging health risks from environmental changes. The implementation of new epidemiological methods and predictive models has provided valuable insights for responding to emerging and re-emerging infectious diseases [e.g., monitoring drug abuse and COVID-19 outbreaks using wastewater-based epidemiology (WBE)]. The “One Health”, “Global Health”, and “Planetary Health” concepts highlight the interconnectedness of human, animal, and environmental health, and guide us toward producing comprehensive solutions to meet these health challenges. *BES* is dedicated to documenting and distributing the latest academic developments within these research fields, creating a platform for international scholars to communicate and collaborate, and contributing to human well-being and sustainable growth.

2024 will mark a significant milestone in the history of the *BES*, as the China CDC reintroduces the CAPM to coincide with the 36th anniversary of the journal. These new beginnings herald a new chapter in the history of the journal. Professor Hongbing Shen, Senior Advisor to *BES* and Director of the China CDC, has stressed the importance of seizing this new developmental stage and the need to establish new developmental objectives

for *BES*, with the goal of positioning *BES* as a leading and authoritative journal in the global public health field. By leveraging the China CDC's ongoing reforms, we must maintain our traditions while fostering innovation, maximize our academic resources, and come together in spirit and action to promote academic progress in the global public health arena^[12]. Junshi Chen, Senior Advisor to *BES* and Professor of the China National Center for Food Safety Risk Assessment (CFSA), has noted that *BES* should not only strive to achieve a higher academic standard and impact factor, but also enhance the global influence of China's innovations in public health and related disciplines^[13]. Wenhua Zhao, Honorary Editor-in-Chief of *BES* and Professor at the National Institute for Nutrition and Health, believes that with strong leadership from the China CDC and through the collective efforts of authors, readers, and editors, the *BES* journal will always remember its original intention, devote itself wholeheartedly, shoulder its mission, and sustainably develop. It will become a bridge and link for academic exchanges in public health between China and the world, as well as the world and China. High-quality developments during this new era will undoubtedly place higher demands on *BES* to update its strategic goals and developmental directions. Consequently, *BES* has outlined a 5-year strategic development plan to achieve these goals. First, *BES* aims to establish itself as an English-language counterpart to the *China CDC Weekly* within the framework of the China CDC/CAPM, in line with their distinctive development foci. *China CDC Weekly* focuses on reporting public health issues and challenges, significant national policies, and major initiatives in the fields of public health and disease prevention and control. *BES* concentrates on the emerging scientific and technological issues in these fields, with a particular focus on applied basic research and mechanistic studies that delve into the pathogenic mechanisms of pathogens such as nutrition, environment, occupation, and radiation, among other factors, and biology on chronic and infectious diseases. Second, *BES* will strive to enhance its academic standards and influence, increasing the number of publications while maintaining strict quality standards, with the goal of joining the ranks of the First Quartile (Q1) of public health, environmental health, and occupational health journals classified by the *JCR* within a decade.

To realize this ambitious vision, we propose the following five strategic initiatives. Firstly, to enhance the overall quality of publications, we will adopt multiple strategies to attract high-quality manuscripts, actively solicit submissions from top experts in relevant disciplines, organize special issues and supplements around domestic and international research hotspots and scientific frontiers, ensure the publication of articles with original innovation and breakthrough potential, and establish an annual best paper award to recognize outstanding research achievements. Secondly, to optimize the peer-review process, *BES* will implement reforms such as refining the responsibilities of the Editor-in-Chief, standardizing the evaluation and rotation systems for editorial board members, appointing young editors, and establishing a comprehensive reviewer database to ensure an efficient and smooth editorial workflow. We will also strengthen exchanges and cooperation with internationally renowned publishers, employ professional scientific editors, and engage top-tier scientists in journal operations to optimize the manuscript review procedures, shorten the submission-to-publication timeline, and enhance the quality and efficiency of peer-review processes. Thirdly, *BES* is committed to expanding the journal's prestige and outreach. We will create an ethos befitting an international publication by increasing the proportion of non-Chinese nationals on the editorial board from the current one-fourth to one-third. Through establishing overseas branches, organizing international academic conferences, and leveraging resources from the CAPM and the Chinese Preventive Medicine Association (CPMA), *BES* will organize international themed academic conferences to promote high-level academic exchanges and cooperation both domestically and internationally, gradually narrowing the gap with world-class journals and enhancing the journal's international influence. Fourthly, *BES* will enhance its digital infrastructure, streamline resource integration with digital development, improve the visual management of digital publishing workflows, and ensure precise control at each step of the manuscript-handling process to enhance publishing efficiency and quality. Fifthly, *BES* will emphasize the pivotal role of article recommendations in planning high-quality content, boosting reader engagement, and increasing citation rates. By the role of article promotion in planning high-quality content, serving readers, expanding influence, we will ensure that the pivotal research published in *BES* gains broad recognition, thereby steadily enhancing the journal's reputation and impact factor.

As the new Editor-in-Chief of *BES*, I am deeply aware of our honorable yet arduous mission, with challenges and opportunities coexisting. I am determined to guide the *BES* editorial board and editorial office to honor, remembering Professor Chunming Chen's foundational ethos of founding the journal, keeping in mind the mission and responsibilities of *BES*, and adhering to the spirit of openness, cooperation, reform, and innovation. My steadfast commitment is to propel *BES* into becoming an internationally authoritative journal and a more influential voice in global public health and environmental science within the next 5–10 years.

Looking forward, we will serve the global community with a scientific foundation rooted in Chinese perspectives and strive to make greater contributions to the health and well-being of humanity.

Let us join hands and move forward together to create a brilliant future for *BES*!

REFERENCES

1. Chen CM, Coulston F, Lu FC. Forward. *Biomed Environ Sci*, 1988; 1, 1–3.
2. Zhou BF, Cooperative Meta-Analysis Group of the Working Group on Obesity in China. Predictive values of body mass index and waist circumference for risk factors of certain related diseases in Chinese adults—study on optimal cut-off points of body mass index and waist circumference in Chinese adults. *Biomed Environ Sci*, 2002; 15, 83–96.
3. Chen CM, Lu FC. The guidelines for prevention and control of overweight and obesity in Chinese adults. *Biomed Environ Sci*, 2004; 17, 1–36.
4. Chen JS. What can we learn from the 2008 melamine crisis in China?. *Biomed Environ Sci*, 2009; 22, 109–11.
5. Jia XD, Li N, Wang ZT, et al. Assessment on dietary melamine exposure from tainted infant formula. *Biomed Environ Sci*, 2009; 22, 100–3.
6. Lu J, Xiao J, Yang DJ, et al. Study on migration of melamine from food packaging materials on markets. *Biomed Environ Sci*, 2009; 22, 104–8.
7. Miao H, Fan S, Wu YN, et al. Simultaneous determination of melamine, ammeline, and cyanuric acid in milk and milk products by gas chromatography-tandem mass spectrometry. *Biomed Environ Sci*, 2009; 22, 87–94.
8. Wu YN, Zhao YF, Li JG, et al. A survey on occurrence of melamine and its analogues in tainted infant formula in China. *Biomed Environ Sci*, 2009; 22, 95–9.
9. Song PK, Man QQ, Li H, et al. Trends in lipids level and dyslipidemia among Chinese adults, 2002-2015. *Biomed Environ Sci*, 2019; 32, 559–70.
10. Zhao WH, Zhang J, Zhai Y, et al. Blood lipid profile and prevalence of dyslipidemia in Chinese adults. *Biomed Environ Sci*, 2007; 20, 329–35.
11. Writing Committee of the Report on Cardiovascular Health and Diseases in China. Report on cardiovascular health and diseases in China 2021: An updated summary. *Biomed Environ Sci*, 2022; 35, 573–603.
12. Shen HB. Seizing opportunities for further advancements - Address at the 35th anniversary symposium of BES. *Biomed Environ Sci*, 2024; 37, 1–2.
13. Chen JS. Uphold the Original Intention and Work together for Future Development— Speech at the 35th Anniversary Symposium of BES. *Biomed Environ Sci*, 2024; 37, 563–4.