Letter from the Founder of the Microbiologists’ Warning Movement

In 2019, a group of microbiologists, including myself, published the Microbiologists’ Warning consensus statement to present a warning to humanity from the perspective of microbiology. At the heart of the warning is a call for governments and institutions to shift policy away from being solely focused on economic growth and move toward a conservation economy. The United Nations Sustainable Development Goals complement the warning by addressing sustainability in a manner that is framed around environmental, economic and social needs.

In 2023, the American Society for Microbiology acquired the Microbiologists’ Warning site as part of the ASM Scientific Portfolio on Climate Change & Microbes. This initiative, led by the American Academy of Microbiology, focuses on increasing scientific understanding about climate change and microbes, informing climate change policies and driving market innovations. These foci are aligned with the Microbiologists’ Warning calls for actions as outlined below:

- Promote greater recognition of microbial life as the support system of the biosphere.
- Ensure inclusion of microbes in climate change research.
- Develop a focus on microbial feedback mechanisms in the monitoring of greenhouse gas fluxes and investment in long-term monitoring.
- Incorporate microbial processes into ecosystem and Earth System models to improve predictions under climate change scenarios.
- Develop innovative microbial technologies to minimize and mitigate climate change impacts, reduce pollution and eliminate reliance on fossil fuels.
- Explicitly consider microorganisms for the development of policy and management decisions.

For these actions to occur, microbiologists must be more vocal to communicate the roles of microbes in climate change and reach beyond the microbial sciences community. ASM’s commitment to focusing on climate change and microbes and convening of a global community of scientists from climate science, ecology and modeling build upon the original mission of the Microbiologists’ Warning site. I have no doubt that the legacy and vision of the Microbiologists’ Warning site will live on under the stewardship of ASM. I look forward to seeing how this project continues to evolve and combat the momentous threat of climate change through the collaboration with an even greater, more diverse community.

Sincerely,

Rick Cavicchioli, Ph.D.