



















Classic Spotlights: Selected Highlights from the First 100 Years of the *Journal of Bacteriology*

 Judith P. Armitage,^a  Anke Becker,^b  Peter J. Christie,^c  Piet A. J. de Boer,^d
 Victor J. DiRita,^e  Richard L. Gourse,^f  Tina M. Henkin,^g  William Margolin,^c
 William W. Metcalf,^h  Conrad W. Mullineaux,ⁱ  George A. O'Toole,^j
 John S. Parkinson,^k  Olaf Schneewind,^l  Thomas J. Silhavy,^m  Ann M. Stock,ⁿ
 Igor B. Zhulin^o

Department of Biochemistry, University of Oxford, Oxford, United Kingdom^a; LOEWE Center for Synthetic Microbiology, Philipps-Universität Marburg, Marburg, Germany^b; Department of Microbiology and Molecular Genetics, McGovern Medical School, Houston, Texas, USA^c; Department of Molecular Biology & Microbiology, School of Medicine, Case Western Reserve University, Cleveland, Ohio, USA^d; Department of Microbiology & Molecular Genetics, Michigan State University, East Lansing, Michigan, USA^e; Department of Bacteriology, University of Wisconsin—Madison, Madison, Wisconsin, USA^f; Department of Microbiology, Ohio State University, Columbus, Ohio, USA^g; Department of Microbiology & Institute for Genomic Biology, University of Illinois at Urbana-Champaign, Urbana, Illinois, USA^h; School of Biological and Chemical Sciences, Queen Mary, University of London, London, United Kingdomⁱ; Department of Microbiology & Immunology, Geisel School of Medicine at Dartmouth, Hanover, New Hampshire, USA^j; Department of Biology, University of Utah, Salt Lake City, Utah, USA^k; Department of Microbiology, University of Chicago, Chicago, Illinois, USA^l; Department of Molecular Biology, Princeton University, Princeton, New Jersey, USA^m; Department of Biochemistry & Molecular Biology, Rutgers University-Robert Wood Johnson Medical School, Piscataway, New Jersey, USAⁿ; Computing & Computational Sciences, Oak Ridge National Laboratory and Department of Microbiology, University of Tennessee, Knoxville, Tennessee, USA^o

“Sciences are not made but born. . . .

“Bacteriology must henceforward be recognized as a broad and fundamental branch of science, coordinate with, rather than subordinate to, the other grand divisions of biology such as medicine, agriculture, zoology and botany. . . .

“In its [microbiology’s] further differentiation and development the present JOURNAL should be a powerful factor. May the event justify both our hope and our expectation.”

—W. T. Sedgwick, forward to the first issue of the *Journal of Bacteriology*, 1916

The year 2016 marked the 100th anniversary of the *Journal of Bacteriology*. As part of the celebration, we the editors decided to highlight landmark papers published in the oldest of the journals of the American Society for Microbiology. During the summer of 2015, we collected a list of such papers from members of our Editorial Board. Altogether there were about 120 papers identified. A summary of two or three of these papers was published in nearly every issue of the journal throughout 2016, and a few were carried over into the early issues of 2017. We called these summaries Classic Spotlights, and we present the entire collection [here](#). We think that this compilation highlights the importance of the *Journal of Bacteriology* to the field of microbiology.

Nowadays many scientists follow the literature with automatic keyword searches on the Internet, and we think that this is especially true for younger scientists. Accordingly, they may not look at the table of contents and thus may not even know that the Classic Spotlight series exists. Thus, we decided to publish this collection in electronic format. Please spread the word. We think that this collection may prove to be a very useful

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Address correspondence to Thomas J. Silhavy, tsilhavy@princeton.edu.

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teaching tool, as well as a fun adventure for those interested in the history of microbiology.

Several facts became apparent while making this collection. First of all, the most influential papers are not the most highly cited papers. Scientific quality today is often judged by Impact Factors, i.e., the number of citations in the first 2 years after publication. But ask yourself this: would you prefer to have 10 minutes of fame or to be remembered long after the initial glow fades? As a group, we editors strongly favor the second criterion. These Classic Spotlights summarize manuscripts that stand out for their important and lasting impact on the field, and while some describe breakthrough moments that had immediate impact, the significance of others was not recognized until much later. In all cases, however, these classic papers describe research that changed the way we understand and conduct microbiology. Their "historical impact factor" can be seen in the fact that these papers continue to be cited, in many cases, decades after their initial appearance.