

CONTENTS • DECEMBER 2021 • VOLUME 203, NO. 23

COVER IMAGE



Cover photograph: *Paraburkholderia unamae*, a Gram-negative beneficial plant-associative bacterium, visualized using atomic force microscopy. The polar flagella seen on cells are used in swimming motility, which is regulated by multiple copies of the *flhDC* genes. (See related article at [e00293-21](#).) (Copyright © 2021 American Society for Microbiology. All Rights Reserved.)

SPOTLIGHT

Articles of Significant Interest in This Issue e00497-21

RESEARCH ARTICLES

An AraC/XylS Family Transcriptional Regulator Modulates the Oxidative Stress Response of *Francisella tularensis* e00185-21

Dina Marghani, Zhuo Ma, Anthony J. Centone, Weihua Huang, Meenakshi Malik, Chandra Shekhar Bakshi

***Shigella flexneri* Diguanylate Cyclases Regulate Virulence** e00242-21

Ruchi Ojha, Ashley A. Dittmar, Geoffrey B. Severin, Benjamin J. Koestler

Multiple Copies of *flhDC* in *Paraburkholderia unamae* Regulate Flagellar Gene Expression, Motility, and Biofilm Formation e00293-21

Shelley N.-M. Thai, Michelle R. Lum, Jeanine Naegle, Michael Onofre, Hassan Abdulla, Allison Garcia, Andreh Fiterz, Ashley Arnell, Thuthiri T. Lwin, Aaron Kavanaugh, Zade Hikmat, Nora Garabedian, Ryan Toan Ngo, Brenda Dimaya, Adan Escamilla, Luiza Barseghyan, Maria Shibatsuji, Salma Soltani, Luke Butcher, Firas Hikmat, Dro Amirian, Artin Bazikyan, Nathan Brandt, Mary Sarkisian, Xavier Munoz, Andrew Ovakimyan, Emily Burnett, Jennifer Ngoc Pham, Ania Shirvanian, Roberto Hernandez, Maria Vardapetyan, Matthew Wada, Cuauhtemoc Ramirez, Martin Zakarian, Fabrizio Billi

The Mutant β^{E202K} Sliding Clamp Protein Impairs DNA Polymerase III Replication Activity e00303-21

Caleb Homiski, Michelle K. Scotland, Vignesh M. P. Babu, Sundari Chodavarapu, Robert W. Maul, Jon M. Kaguni, Mark D. Sutton

Elevated Levels of the *Escherichia coli* *nrdAB*-Encoded Ribonucleotide Reductase Counteract the Toxicity Caused by an Increased Abundance of the β Clamp e00304-21

Vignesh M. P. Babu, Caleb Homiski, Michelle K. Scotland, Sundari Chodavarapu, Jon M. Kaguni, Mark D. Sutton

Profiling *Myxococcus xanthus* Swarming Phenotypes through Mutation and Environmental Variation e00306-21

Linnea J. Ritchie, Erin R. Curtis, Kimberly A. Murphy, Roy D. Welch

Redox Sensing Modulates the Activity of the ComE Response Regulator of *Streptococcus mutans* e00330-21

Hemendra Pal Singh Dhaked, Luyang Cao, Indranil Biswas

- Dissolved Inorganic Carbon-Accumulating Complexes from Autotrophic Bacteria from Extreme Environments** e00377-21
Sarah Schmid, Dale Chaput, Mya Breitbart, Rebecca Hines, Samantha Williams, Hunter K. Gossett, Sheila D. Parsi, Rebecca Peterson, Robert A. Whittaker, Angela Tarver, Kathleen M. Scott
- The Biosynthetic Pathway of Ubiquinone Contributes to Pathogenicity of *Francisella novicida*** e00400-21
Katayoun Kazemzadeh, Mahmoud Hajj Chehade, Gautier Hourdoir, Camille Dorothée Brunet, Yvan Caspar, Laurent Loiseau, Frederic Barras, Fabien Pierrel, Ludovic Pelosi
- Regulation of the *icl1* Gene Encoding the Major Isocitrate Lyase in *Mycobacterium smegmatis*** e00402-21
Eon-Min Ko, Ju-Yeon Kim, Sujin Lee, Suhkmann Kim, Jihwan Hwang, Jeong-Il Oh