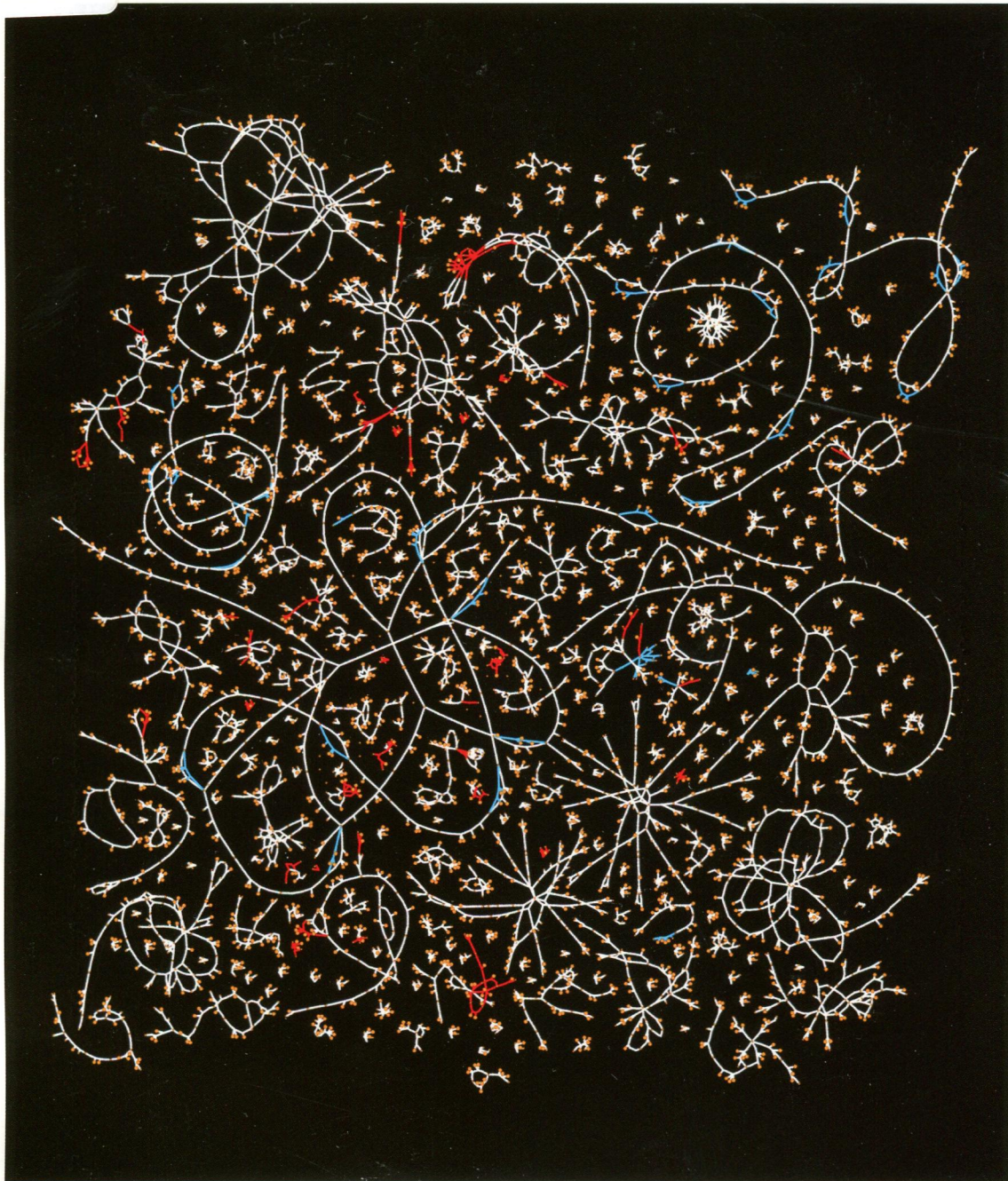


PII
J80/basm



January 2014
Volume 196
Number 2
Published Twice Monthly



AMERICAN
SOCIETY FOR
MICROBIOLOGY

JB

Journal of Bacteriology

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**Emergence of the P2 Phenotype in *Pseudomonas aeruginosa*
PAO1 Strains Involves Various Mutations in *mexT* or *mexF***

Preston M. Luong, Benjamin D.
Shogan, Alexander Zaborin, Natalia
Belogortseva, Joshua D. ShROUT, Olga
Zaborina, John C. Alverdy

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Cover photograph (Copyright © 2014, American Society for Microbiology. All Rights Reserved.): *Burkholderia cenocepacia* and *Burkholderia multivorans* are multidrug-resistant, opportunistic Gram-negative pathogens. Mechanisms underlying differing clinical outcomes are poorly understood. Because of their large metabolic gene reservoir, reconciled genome-scale metabolic reconstructions were created to compare virulence-related metabolic pathways, capabilities to adapt to growth in the cystic fibrosis lung, and potential metabolic targets for therapeutic intervention. This visualization of reactions (lines) and associated metabolites (circles) of the two networks indicates the scope of metabolic reactions that are common (gray) or unique to *B. cenocepacia* (red) or *B. multivorans* (blue). (See related article on page 210.)