

ADVANCES IN MICROBIAL PHYSIOLOGY

EDITED BY ROBERT K. POOLE

C O N T E N T S

Geobacter: The Microbe Electric's Physiology, Ecology, and Practical Applications

Derek R. Lovley, Toshiyuki Ueki, Tian Zhang, Nikhil S. Malvankar, Pravin M. Shrestha, Kelly A. Flanagan, Muktak Aklujkar, Jessica E. Butler, Ludovic Giloteaux, Amelia-Elena Rotaru, Dawn E. Holmes, Ashley E. Franks, Roberto Orellana, Carla Risso and Kelly P. Nevin

Network Approaches to the Functional Analysis of Microbial Proteins

*J. S. Hallinan, K. James and A. Wipat*The Diversity of Microbial Responses to Nitric Oxide and Agents of Nitrosative Stress:
Close Cousins but not Identical Twins*Lesley A. H. Bowman, Samantha McLean, Robert K. Poole, and Jon M. Fukuto**Cover illustration.*Upper left: Transmission electron micrograph of *Geobacter metallireducens* with pili (blue) and flagella (Susan Childers and Melissa Barlett)

Upper right: Sediment microfuel cells (Ben Barnhart)

Lower left: Scanning electron micrograph of *Geobacter sulfurreducens* anode biofilm (Ching Leang)Lower right: Transmission electron micrograph of *Geobacter sulfurreducens* with extensive pilin network (Anna Klimes and Ernie Carbone)

ACADEMIC PRESS

An imprint of Elsevier
elsevierdirect.com

ISBN 978-0-12-387661-4



9 780123 876614