

INSTRUCTIONS TO AUTHORS

2008 Instructions to Authors

1-22

GENETICS AND MOLECULAR BIOLOGY

Recycling of Shiga Toxin 2 Genes in Sorbitol-Fermenting Enterohemorrhagic *Escherichia coli* O157:NM

Alexander Mellmann, Shan Lu, Helge Karch, Jian-guo Xu, Dag Harmsen, M. Alexander Schmidt, and Martina Bielaszewska 67-72

Cloning and Characterization of Two *Lactobacillus casei* Genes Encoding a Cystathionine Lyase

Stefan Irmeler, Sylvie Raboud, Beata Beisert, Doris Rauhut, and Hélène Berthoud 99-106

Identification of *Streptococcus uberis* Multilocus Sequence Types Highly Associated with Mastitis

Takehiro Tomita, Brian Meehan, Nalin Wongkattiya, Jakob Malmo, Gillian Pullinger, James Leigh, and Margaret Deighton 114-124

ENZYMOLOGY AND PROTEIN ENGINEERING

Cholest-4-En-3-One- Δ^1 -Dehydrogenase, a Flavoprotein Catalyzing the Second Step in Anoxic Cholesterol Metabolism

Yin-Ru Chiang, Wael Ismail, Sébastien Gallien, Dimitri Heintz, Alain Van Dorsselaer, and Georg Fuchs 107-113

Cloning of a Novel Gene Encoding β -1,3-Xylosidase from a Marine Bacterium, *Vibrio* sp. Strain XY-214, and Characterization of the Gene Product

Yoshiaki Umemoto, Ryosuke Onishi, and Toshiyoshi Araki 305-308

PHYSIOLOGY AND BIOTECHNOLOGY

Novel Mechanism for Conditional Aerobic Growth of the Anaerobic Bacterium *Treponema denticola*

Yanlai Lai and Lianrui Chu 73-79

Utilization of Molasses Sugar for Lactic Acid Production by *Lactobacillus delbrueckii* subsp. *delbrueckii* Mutant Uc-3 in Batch Fermentation

Arti Dumbrepatil, Mukund Adsul, Shivani Chaudhari, Jayant Khire, and Digambar Gokhale 333-335

MYCOLOGY

Carbon Source Dependence and Photostimulation of Conidiation in *Hypocrea atroviridis*

Martina A. Friedl, Christian P. Kubicek, and Irina S. Druzhinina 245-250

PUBLIC HEALTH MICROBIOLOGY

Orthopoxvirus Detection in Environmental Specimens during Suspected Bioterror Attacks: Inhibitory Influences of Common Household Products

Andreas Kurth, John Achenbach, Liljia Miller, Ian M. Mackay, Georg Pauli, and Andreas Nitsche 32-37

Population Structures of Two Genotypes of *Vibrio vulnificus* in Oysters (*Crassostrea virginica*) and Seawater

Elizabeth Warner and James D. Oliver 80-85

Analysis of Fungal Flora in Indoor Dust by Ribosomal DNA Sequence Analysis, Quantitative PCR, and Culture

M. Pitkäranta, T. Meklin, A. Hyvärinen, L. Paulin, P. Auvinen, A. Nevalainen, and H. Rintala 233-244

Species of Environmental Mycobacteria Differ in Their Abilities To Grow in Human, Mouse, and Carp Macrophages and with Regard to the Presence of Mycobacterial Virulence Genes, as Observed by DNA Microarray Hybridization	Melanie J. Harrieff, Martin Wu, Michael L. Kent, and Luiz E. Bermudez	275-285
Effects of UV Radiation on Photolyase and Implications with Regards to Photoreactivation following Low- and Medium-Pressure UV Disinfection	Jiangyong Hu and Puay Hoon Quek	327-328
Genomic Markers for Differentiation of <i>Francisella tularensis</i> subsp. <i>tularensis</i> A.I and A.II Strains	Claudia R. Molins-Schneekloth, John T. Belisle, and Jeannine M. Petersen	336-341
ENVIRONMENTAL MICROBIOLOGY		
Ni Uptake and Limitation in Marine <i>Synechococcus</i> Strains	Christopher L. Dupont, Katherine Barbeau, and Brian Palenik	23-31
Conservation of the Chitin Utilization Pathway in the <i>Vibrionaceae</i>	Dana E. Hunt, Dirk Gevers, Nisha M. Vahora, and Martin F. Polz	44-51
Mutations in the <i>lux</i> Operon of Natural Dark Mutants in the Genus <i>Vibrio</i>	Elizabeth A. O'Grady and Charles F. Wimpee	61-66
Survival of and In Situ Gene Expression by <i>Vibrio vulnificus</i> at Varying Salinities in Estuarine Environments	Melissa K. Jones, Elizabeth Warner, and James D. Oliver	182-187
Short-Term Temporal Variability in Airborne Bacterial and Fungal Populations	Noah Fierer, Zongzhi Liu, Mari Rodríguez-Hernández, Rob Knight, Matthew Henn, and Mark T. Hernandez	200-207
Environmental Determinants of the Occurrence and Distribution of <i>Vibrio parahaemolyticus</i> in the Rias of Galicia, Spain	Jaime Martinez-Urtaza, Antonio Lozano-Leon, Jose Varela-Pet, Joaquin Trinanes, Yolanda Pazos, and Oscar Garcia-Martin	265-274
Characterization of Two New Genes, <i>amoR</i> and <i>amoD</i> , in the <i>amo</i> Operon of the Marine Ammonia Oxidizer <i>Nitrosococcus oceani</i> ATCC 19707	Amal F. El Sheikh, Amisha T. Poret-Peterson, and Martin G. Klotz	312-318
Formation of <i>N</i> -Ethylmaleimide (NEM)-Glutathione Conjugate and <i>N</i> -Ethylmaleamic Acid Revealed by Mass Spectral Characterization of Intracellular and Extracellular Microbial Metabolites of NEM	Elmer-Rico E. Mojica, Sungpyo Kim, and Diana S. Aga	323-326
Eucaryotic Diversity in a Hypersaline Microbial Mat	Leah M. Feazel, John R. Spear, Alicia B. Berger, J. Kirk Harris, Daniel N. Frank, Ruth E. Ley, and Norman R. Pace	329-332
MICROBIAL ECOLOGY		
Cross-Ocean Distribution of <i>Rhodobacterales</i> Bacteria as Primary Surface Colonizers in Temperate Coastal Marine Waters	Hongyue Dang, Tiegang Li, Mingna Chen, and Guiqiao Huang	52-60
Bacterial Community Composition in Central European Running Waters Examined by Temperature Gradient Gel Electrophoresis and Sequence Analysis of 16S rRNA Genes	Sara Beier, Karl-Paul Witzel, and Jürgen Marxsen	188-199
Effects of Wildfire and Harvest Disturbances on Forest Soil Bacterial Communities	Nancy R. Smith, Barbara E. Kishchuk, and William W. Mohn	216-224
Genetic and Immunological Comparison of the Cladoceran Parasite <i>Pasteuria ramosa</i> with the Nematode Parasite <i>Pasteuria penetrans</i>	Liesbeth M. Schmidt, Laurence Mouton, Guang Nong, Dieter Ebert, and James F. Preston	259-264
Quantifying Community Dynamics of Nitrifiers in Functionally Stable Reactors	Lieven Wittebolle, Han Vervaeren, Willy Verstraete, and Nico Boon	286-293

In Situ Activity of Suspended and Immobilized Microbial Communities as Measured by Fluorescence Lifetime Imaging

Petr Walczysko, Ute Kuhlicke, Sabine Knappe, Christiana Cordes, and Thomas R. Neu 294-299

GEOMICROBIOLOGY

Subsurface Microbial Diversity in Deep-Granitic-Fracture Water in Colorado

Jason W. Sahl, Raleigh Schmidt, Elizabeth D. Swanner, Kevin W. Mandernack, Alexis S. Templeton, Thomas L. Kieft, Richard L. Smith, William E. Sanford, Robert L. Callaghan, Jeffry B. Mitton, and John R. Spear 143-152

Growth of Thermophilic and Hyperthermophilic Fe(III)-Reducing Microorganisms on a Ferruginous Smectite as the Sole Electron Acceptor

Kazem Kashefi, Evgenya S. Shelobolina, W. Crawford Elliott, and Derek R. Lovley 251-258

Thickness and Surface Density of Extracellular Polymers on *Acidithiobacillus ferrooxidans*

Eric S. Taylor and Steven K. Lower 309-311

FOOD MICROBIOLOGY

Effects of Dried Distillers' Grain on Fecal Prevalence and Growth of *Escherichia coli* O157 in Batch Culture Fermentations from Cattle

M. E. Jacob, J. T. Fox, J. S. Drouillard, D. G. Renter, and T. G. Nagaraja 38-43

Influence of Turning and Environmental Contamination on the Dynamics of Populations of Lactic Acid and Acetic Acid Bacteria Involved in Spontaneous Cocoa Bean Heap Fermentation in Ghana

Nicholas Camu, Ángel González, Tom De Winter, Ann Van Schoor, Katrien De Bruyne, Peter Vandamme, Jemmy S. Takrama, Solomon K. Addo, and Luc De Vuyst 86-98

Comparative Analysis of the σ^B -Dependent Stress Responses in *Listeria monocytogenes* and *Listeria innocua* Strains Exposed to Selected Stress Conditions

Sarita Raengpradub, Martin Wiedmann, and Kathryn J. Boor 158-171

Microbial Interactions within a Cheese Microbial Community

Jérôme Mounier, Christophe Monnet, Tatiana Vallaëys, Roger Arditi, Anne-Sophie Sarthou, Arnaud Hélias, and Françoise Irlinger 172-181

***Lactobacillus* Strain Diversity Based on Partial *hsp60* Gene Sequences and Design of PCR-Restriction Fragment Length Polymorphism Assays for Species Identification and Differentiation**

Giuseppe Blaiotta, Vincenzina Fusco, Danilo Ercolini, Maria Aponte, Olimpia Pepe, and Francesco Villani 208-215

PLANT MICROBIOLOGY

Host-Synthesized Secondary Compounds Influence the In Vitro Interactions between Fungal Endophytes of Maize

Megan Saunders and Linda M. Kohn 136-142

INVERTEBRATE MICROBIOLOGY

Plasmid Patterns of *Bacillus thuringiensis* Type Strains

Arturo Reyes-Ramírez and Jorge E. Ibarra 125-129

Fitness Variation of *Borrelia burgdorferi* Sensu Stricto Strains in Mice

Klára Hanincová, Nicholas H. Ogden, Maria Diuk-Wasser, Christopher J. Pappas, Radha Iyer, Durland Fish, Ira Schwartz, and Klaus Kurtenbach 153-157

METHODS

Comparison and Validation of Methods To Quantify Cry1Ab Toxin from *Bacillus thuringiensis* for Standardization of Insect Bioassays

André L. B. Crespo, Terence A. Spencer, Emily Nekl, Marianne Pusztai-Carey, William J. Moar, and Blair D. Siegfried 130-135

Prokaryotic Suppression Subtractive Hybridization PCR cDNA Subtraction, a Targeted Method To Identify Differentially Expressed Genes

Susan K. De Long, Kerry A. Kinney, and Mary Jo Kirisits 225-232

Single-Nucleotide Primer Extension Assay for Detection and Sequence Typing of "*Dehalococcoides*" spp.

Marcell Nikolausz, Antonis Chatzinotas, Márton Palatinszky, Gwenaél Imfeld, Paula Martinez, and Matthias Kästner 300-304

Conjugative Transfer between *Escherichia coli* and *Leptospira* spp. as a New Genetic Tool

Mathieu Picardeau 319-322

AUTHORS' CORRECTIONS

Microbial Composition and Structure of Aerobic Granular Sewage Biofilms

S. D. Weber, G. Wanner, W. Ludwig, K.-H. Schleifer, and J. Fried 342

Molecular Epidemiologic Investigation of *Campylobacter coli* in Swine Production Systems, Using Multilocus Sequence Typing

Siddhartha Thakur, W. E. Morgan Morrow, Julie A. Funk, Peter B. Bahnson, and Wondwossen A. Gebreyes 343

Cover photograph (Copyright © 2008, American Society for Microbiology. All Rights Reserved.): Colored scanning electron micrograph of an acidophilic bacterial biofilm. This sample was collected from a 75-m-deep borehole located at the Kempton Mine complex in Maryland. Image courtesy of Graeme Bowles, Philip Piccoli, Philip Candela, Michael Seuffer, and Steven K. Lower. (See related article on page 309.)