

TABLE OF CONTENTS

SPOTLIGHT

Articles of Significant Interest Selected from This Issue by the Editors	4773
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BIOTECHNOLOGY

Activating Phosphoenolpyruvate Carboxylase and Phosphoenolpyruvate Carboxykinase in Combination for Improvement of Succinate Production	Zaigao Tan, Xinna Zhu, Jing Chen, Qingyan Li, Xueli Zhang	4838–4844
Roles of the Yap1 Transcription Factor and Antioxidants in <i>Saccharomyces cerevisiae</i> 's Tolerance to Furfural and 5-Hydroxymethylfurfural, Which Function as Thiol-Reactive Electrophiles Generating Oxidative Stress	Daehee Kim, Ji-Sook Hahn	5069–5077

ENVIRONMENTAL MICROBIOLOGY

Transcriptome Sequencing (RNA-seq) Analysis of the Effects of Metal Nanoparticle Exposure on the Transcriptome of <i>Chlamydomonas reinhardtii</i>	Dana F. Simon, Rute F. Domingos, Charles Hauser, Colin M. Hutchins, William Zerges, Kevin J. Wilkinson	4774–4785
Lytic Infection of <i>Lactococcus lactis</i> by Bacteriophages Tuc2009 and c2 Triggers Alternative Transcriptional Host Responses	Stuart Ainsworth, Aldert Zomer, Jennifer Mahony, Douwe van Sinderen	4786–4798
Dispersal and Survival of <i>Flavobacterium psychrophilum</i> Phages <i>In Vivo</i> in Rainbow Trout and <i>In Vitro</i> under Laboratory Conditions: Implications for Their Use in Phage Therapy	Lone Madsen, Sif K. Bertelsen, Inger Dalsgaard, Mathias Middelboe	4853–4861
Molecular Characterization of “ <i>Candidatus Similichlamydia latridicola</i> ” gen. nov., sp. nov. (<i>Chlamydiales</i> : “ <i>Candidatus Parilichlamydiaceae</i> ”), a Novel <i>Chlamydia</i> -Like Epitheliocystis Agent in the Striped Trumpeter, <i>Latris lineata</i> (Forster)	M. C. Stride, A. Polkinghorne, T. L. Miller, B. F. Nowak	4914–4920
Oxygen Consumption Rates of Bacteria under Nutrient-Limited Conditions	Timothy E. Riedel, William M. Berelson, Kenneth H. Nealson, Steven E. Finkel	4921–4931
Litter Supply as a Driver of Microbial Activity and Community Structure on Decomposing Leaves: a Test in Experimental Streams	Aline Frossard, Linda Gerull, Michael Mutz, Mark O. Gessner	4965–4973
Molecular Epidemiology of Newcastle Disease in Mexico and the Potential Spillover of Viruses from Poultry into Wild Bird Species	Stivalis Cardenas Garcia, Roberto Navarro Lopez, Romeo Morales, Miguel A. Olvera, Miguel A. Marquez, Ruben Merino, Patti J. Miller, Claudio L. Afonso	4985–4992
Real-Time PCR for Quantitative Analysis of Human Commensal <i>Escherichia coli</i> Populations Reveals a High Frequency of Subdominant Phylogroups	Mounira Smati, Olivier Clermont, Frédéric Le Gal, Olivier Schichmanoff, Françoise Jauréguy, Alain Eddi, Erick Denamur, Bertrand Picard, for the Coliville Group	5005–5012
Acetate Production from Oil under Sulfate-Reducing Conditions in Bioreactors Injected with Sulfate and Nitrate	Cameron M. Callbeck, Akhil Agrawal, Gerrit Voordouw	5059–5068
PCR Characterization Suggests that an Unusual Range of <i>Bartonella</i> Species Infect the Striped Field Mouse (<i>Apodemus agrarius</i>) in Central Europe	Joanna Hildebrand, Anna Paziewska-Harris, Grzegorz Zalesny, Philip D. Harris	5082–5084

***Clostridium perfringens* Is Not Suitable for the Indication of Fecal Pollution from Ruminant Wildlife but Is Associated with Excreta from Nonherbivorous Animals and Human Sewage**

J. Vierheilg, C. Frick, R. E. Mayer, 5089–5092
A. K. T. Kirschner, G. H. Reischer,
J. Derx, R. L. Mach, R. Sommer,
A. H. Farnleitner

ENZYMOLGY AND PROTEIN ENGINEERING

L-Amino Acid Ligase from *Pseudomonas syringae* Producing Tabtoxin Can Be Used for Enzymatic Synthesis of Various Functional Peptides

Toshinobu Arai, Yasuhiro Arimura, 5023–5029
Shun Ishikura, Kuniki Kino

Engineering the *meso*-Diaminopimelate Dehydrogenase from *Symbiobacterium thermophilum* by Site Saturation Mutagenesis for D-Phenylalanine Synthesis

Xiuzhen Gao, Fang Huang, Jinhui Feng, 5078–5081
Xi Chen, Hailing Zhang, Zhixiang
Wang, Qiaqing Wu, Dunming Zhu

EVOLUTIONARY AND GENOMIC MICROBIOLOGY

Proposed Model for the High Rate of Rearrangement and Rapid Migration Observed in Some Inca/C Plasmid Lineages

R. J. Meinersmann, R. L. Lindsey, 4806–4814
J. L. Bono, T. P. Smith, B. B. Oakley

Sequence Variability of P2-Like Prophage Genomes Carrying the Cytolethal Distending Toxin V Operon in *Escherichia coli* O157

Domonkos Sváb, Balázs Horváth, 4958–4964
Gergely Maróti, Ulrich Dobrindt,
István Tóth

Biosynthesis of the Osmoprotectant Ectoine, but Not Glycine Betaine, Is Critical for Survival of Osmotically Stressed *Vibrio parahaemolyticus* Cells

Serge Y. Ongagna-Yhombi, E. Fidelma 5038–5049
Boyd

FOOD MICROBIOLOGY

Identification and Characterization of a Novel Flagellum-Dependent *Salmonella*-Infecting Bacteriophage, iEPS5

Younho Choi, Hakdong Shin, Ju-Hoon 4829–4837
Lee, Sangryeol Ryu

Shiga Toxin 2-Encoding Bacteriophages in Human Fecal Samples from Healthy Individuals

Alexandre Martinez-Castillo, Pablo 4862–4868
Quirós, Ferran Navarro, Elisenda Miró,
Maite Muniesa

Whole-Genome Transcriptional Analysis of *Escherichia coli* during Heat Inactivation Processes Related to Industrial Cooking

A. Guernec, P. Robichaud-Rincon, 4940–4950
L. Saucier

Oral Administration of Live Exopolysaccharide-Producing *Pedococcus parvulus*, but Not Purified Exopolysaccharide, Suppressed *Enterobacteriaceae* without Affecting Bacterial Diversity in Ceca of Mice

Cecilia Lindström, Jie Xu, Rickard Öste, 5030–5037
Olle Holst, Göran Molin

GENETICS AND MOLECULAR BIOLOGY

Development of a New Method for Detection and Identification of *Oenococcus oeni* Bacteriophages Based on Endolysin Gene Sequence and Randomly Amplified Polymorphic DNA

Francesca Doria, Chiara Napoli, 4799–4805
Antonella Costantini, Graziella Berta,
Juan-Carlos Saiz, Emilia
Garcia-Moruno

Multilocus Genotype Analysis of *Escherichia coli* O157 Isolates from Australia and the United States Provides Evidence of Geographic Divergence

Glen E. Mellor, Thomas E. Besser, 5050–5058
Margaret A. Davis, Brittany Beavis,
WooKyung Jung, Helen V. Smith,
Amy V. Jennison, Christine J. Doyle,
P. Scott Chandry, Kari S. Gobius,
Narelle Fegan

INVERTEBRATE MICROBIOLOGY

Bacterial Cell Wall Synthesis Gene *uppP* Is Required for *Burkholderia* Colonization of the Stinkbug Gut

Jiyeun Kate Kim, Ho Jin Lee, 4879–4886
Yoshitomo Kikuchi, Wataru Kitagawa,
Naruo Nikoh, Takema Fukatsu,
Bok Luel Lee

Diversity of Bacterial Endosymbionts Associated with <i>Macrosteles</i> Leafhoppers Vectoring Phytopathogenic Phytoplasmas	Yoshiko Ishii, Yu Matsuura, Shigeyuki Kakizawa, Naruo Nikoh, Takema Fukatsu	5013–5022
METHODS		
An Improved Method for <i>oriT</i>-Directed Cloning and Functionalization of Large Bacterial Genomic Regions	Brian H. Kvitko, Ian A. McMillan, Herbert P. Schweizer	4869–4878
Isolation of Optically Targeted Single Bacteria by Application of Fluidic Force Microscopy to Aerobic Anoxygenic Phototrophs from the Phyllosphere	Philipp Stiefel, Tomaso Zambelli, Julia A. Vorholt	4895–4905
Strain/Species-Specific Probe Design for Microbial Identification Microarrays	Qichao Tu, Zhili He, Ye Deng, Jizhong Zhou	5085–5088
MICROBIAL ECOLOGY		
The Microcosm Mediates the Persistence of Shiga Toxin-Producing <i>Escherichia coli</i> in Freshwater Ecosystems	Steven A. Mauro, Hannah Opalko, Kyle Lindsay, Michael P. Colon, Gerald B. Koudelka	4821–4828
Induction of Biofilm Formation in the Betaproteobacterium <i>Burkholderia unamae</i> CK43B Exposed to Exogenous Indole and Gallic Acid	Dongyeop Kim, Irnayuli R. Sitepu, Yasuyuki Hashidoko	4845–4852
Dry/Wet Cycles Change the Activity and Population Dynamics of Methanotrophs in Rice Field Soil	Ke Ma, Ralf Conrad, Yahai Lu	4932–4939
Aquacultured Rainbow Trout (<i>Oncorhynchus mykiss</i>) Possess a Large Core Intestinal Microbiota That Is Resistant to Variation in Diet and Rearing Density	Sandi Wong, Thomas Waldrop, Steven Summerfelt, John Davidson, Frederic Barrows, P. Brett Kenney, Timothy Welch, Gregory D. Wiens, Kevin Snekvik, John F. Rawls, Christopher Good	4974–4984
Proteome of the Nematode-Trapping Cells of the Fungus <i>Monacrosporium haptotylum</i>	Karl-Magnus Andersson, Tejashwari Meerupati, Fredrik Levander, Eva Friman, Dag Åhrén, Anders Tunlid	4993–5004
MYCOLOGY		
Inhibition of <i>Aspergillus niger</i> Phosphate Solubilization by Fluoride Released from Rock Phosphate	Gilberto de Oliveira Mendes, Nikolay Bojkov Vassilev, Victor Hugo Araújo Bonduki, Ivo Ribeiro da Silva, José Ivo Ribeiro, Jr., Maurício Dutra Costa	4906–4913
PUBLIC HEALTH MICROBIOLOGY		
Longitudinal Monitoring of Extended-Spectrum-Beta-Lactamase/AmpC-Producing <i>Escherichia coli</i> at German Broiler Chicken Fattening Farms	H. Laube, A. Friese, C. von Salviati, B. Guerra, A. Käsbohrer, L. Kreienbrock, U. Roesler	4815–4820
Strain-Dependent Augmentation of Tight-Junction Barrier Function in Human Primary Epidermal Keratinocytes by <i>Lactobacillus</i> and <i>Bifidobacterium</i> Lysates	Reshma Sultana, Andrew J. McBain, Catherine A. O'Neill	4887–4894
Adherence to and Invasion of Human Intestinal Cells by <i>Arcobacter</i> Species and Their Virulence Genotypes	Arturo Levican, Aldukali Alkeskas, Claudia Günter, Stephen J. Forsythe, María José Figueras	4951–4957

Cover photograph (Copyright © 2013, American Society for Microbiology. All Rights Reserved): Confocal laser scanning microscopy of iron-rich aggregates (“iron snow”) collected in the central basin of the acidic lignite mine Lake 77 in Brandenburg, Germany. The data set was deconvolved (with Huygens software) and shown as an isosurface projection (using Imaris software). Shown are reflection signals of what are likely iron(III) mineral particles (white), nucleic acid-stained bacteria of different morphologies (green), and autofluorescence of phototrophic organisms (blue). Photo by Thomas R. Neu. (See related article in July 2013, vol. 79, no. 14, p. 4272.)