

Contents Volume 9 · 2006

- A**bel A → Arenas J
Abreu F, Silva KT, Martins JL, Lins U: Cell viability in multicellular magnetotactic prokaryotes 267
Alcalá B → Arenas J
Alexander B, Imhoff JF: Communities of green sulfur bacteria in marine and saline habitats analyzed by gene sequences of 16S rRNA and Fenna-Matthews-Olson protein 259
Alexeeva YV → Ivanova EP
Alonso MP → Blanco M
Alonso PL: Malaria: deploying a candidate vaccine (RTS,S/AS02A) for an old scourge of humankind 83
Arenas J, Abel A, Sánchez S, Alcalá B, Criado MT, Ferreirós LocusNMB0035 codes for a 47 kDa surface-accessible conserved antigen in *Neisseria* 273
Ascaso M → Wierzchos J
- B**adiola I → Bigas A
Barbé J → Bigas A
Becker F, Rhiehl E: Immuno-electron microscopic quantification of the fucoxanthin chlorophyll *a/c* binding polypeptides Fcp2, Fcp4, and Fcp6 of *Cyclotella cryptica* grown under low- and high-light intensities 29
Bellogín RA → de Lyra MCCP
Berlanga M → Guerrero R
Berlanga M → Wierzchos J
Berlanga M, Montero MT, Hernández-Borrell J, Guerrero R: Rapid spectrofluorometric screening of poly-hydroxyalkanoate-producing bacteria from microbial mats 95
Bernárdez MI → Blanco M
Bigas A, Garrido ME, Badiola I, Barbé J, Llagostera M: Colonization capacity and serum bactericidal activity of *Haemophilus parasuis thy* mutans 297
Bizani D → Lisboa MP
Blanco J → Blanco M
Blanco J → Vázquez F
Blanco JE → Blanco M
Blanco M, Blanco JE, Dahbi G, Alonso MP, Mora A, Coira MA, Madrid C, Juárez A, Bernárdez MI, González EA, Blanco J: Identification of two new intimin types in atypical enteropathogenic *Escherichia coli* 103
Blanco M, Lazo L, Dahbi G, Mora A, López C, González EA, Blanco J: Serotypes, virulence genes, and PFGE patterns of enteropathogenic *Escherichia coli* isolated from Cuban pigs with diarrhea 53
Bonatto D → Lisboa MP
- Borkenstein CG, Fischer U: Sulfide removal and elemental sulfur recycling from a sulfide-polluted medium by *Allochromatium vinosum* strain 21D 253
Brandelli A → Lisboa MP
- C**ansado J → Lapeña MA
Capanna E: Grassi *versus* Ross: who solved the riddle of malaria? 69
Cid VJ: Microbiology in the “-omics” era 303
Clear RM → Mishra PK
Coira MA → Blanco M
Criado MT → Arenas J
Cubo MT → de Lyra MCCP
- d**a Costa MS → Empadinhas N
Dahbi G → Blanco M
Dahbi G → Blanco M
de Lyra MCCP, López-Baena FJ, Madinabeitia N, Vinardell JM, Espuny MR, Cubo MT, Bellogín RA, Ruiz-Sainz JE, Ollero FJ: Inactivation of the *Sinorhizobium fredii* HH103 *rhcJ* gene abolishes nodulation outer proteins (Nops) secretion and decreases the symbiotic capacity with soybean 125
Díaz-Ropero MP → Olivares M
Dobson ADW → Power T
- E**mpadinhas N, da Costa MS: Diversity and biosynthesis of compatible solutes in hyper/thermophiles 199
Espuny MR → de Lyra MCCP
- F**erreirós CM → Arenas J
Ferrera I → Sánchez O
Fischer U → Borkenstein CG from the Brazilian Atlantic forest 111
- G**acto M → Lapeña MA
Garabal JI → Vázquez F
García de Oteyza T → Sánchez O
García E → Lapeña MA
Garnica D → Vives-Flórez M
Garrido ME → Bigas A
Gil JA → Mateos LM
Gómez N → Olivares M
González EA → Blanco M
González EA → Vázquez F
Grimalt JO → Sánchez O
Guerrero R → Berlanga M
Guerrero R → Wierzchos J
Guerrero R, Berlanga M: “Life’s unity and flexibility”: the ecological link 225
- H**enriques JAP → Lisboa MP
Hernández-Borrell → Berlanga M
Holmes DS: Taking the pulse of Latin American microbiology 306
- Imhoff JF → Alexander B
Ivanova EP, Alexeeva YV, Pham DK, Wright JP, Nicolau DV: ATP level variations in heterotrophic bacteria during attachment on hydrophilic and hydrophobic surfaces 37
- Juárez A → Blanco M
- Lapeña MA, Vicente-Soler J, Soto T, Madrid M, Núñez A, García E, Cansado J, Gacto M: Light-induced rhythmic changes in thermo-tolerance in stationary-phase cells of *Candida utilis* 61
Lara-Villoslada F → Olivares M
Lasa I: Towards the identification of the common features of bacterial biofilm development 21
Lazo L → Blanco M
Lederberg J: *The Microbe’s Contribution to Biology*-50 years after 155
Letek M → Mateos LM
Lins U → Abreu F
Liras P, Martín JF: Gene clusters for β-lactam antibiotics and control of their expression: why have clusters evolved, and from where did they originate? 9
Lisboa MP, Bonatto D, Bizani D, Henriques JAP, Brandelli A: Characterization of a bacteriocin-like substance produced by *Bacillus amyloliquefaciens* isolated from the Brazilian Atlantic forest 111
Llagostera M → Bigas A
López C → Blanco M
López R: Pneumococcus: the sugar-coated bacterium 179
López-Baena FJ → de Lyra MCCP
- Madinabeitia N → de Lyra MCCP
Madrid C → Blanco M
Madrid M → Lapeña MA
Maldonado JA → Olivares M
Maloy S, Schaechter M: The era of microbiology: a Golden Phoenix 1
Martín JF → Liras P
Martín R → Olivares M
Martins JL → Abreu F
Mas J → Sánchez O
Mateos LM, Ordóñez E, Letek M, Gil JA: *Corynebacterium glutamicum* as a model bacterium for the bioremediation of arsenic 207
Mishra PK, Tewari JP, Clear RM, Turkington TK: Genetic diversity and recombination within populations of *Fusarium pseudogriseum* from western Canada 65
Montero MT → Berlanga M
Mora A → Blanco M
Mora A → Blanco M
Morrissey JP → Power T

- N**avarro F: Acquisition and horizontal diffusion of β -lactam resistance among clinically relevant microorganisms 79
- Nicolau DV → Ivanova EP
- Núñez A → Lapeña MA
- O**livares M, Díaz-Ropero MP, Gómez N, Lara-Villoslada F, Sierra S, Maldonado JA, Martín R, Rodríguez JM, Xaus J: The consumption of two new probiotic strains, *Lactobacillus gasseri* CECT 5714 and *Lactobacillus coryniformis* CECT 5711, boosts the immune system of healthy humans 47
- Ollero FJ → de Lyra MCCP
- Ordóñez E → Mateos LM
- Ortoneda M → Power T
- P**edrós-Alió C: Genomics and marine microbial ecology 191
- Pham DK → Ivanova EP
- Piqueras M: Year's comments for 2006 237
- Power T, Ortoneda M, Morrissey JP, Dobson ADW: Differential expression of genes involved in iron metabolism in *Aspergillus fumigatus* 281
- R**hiel E → Becker F
- Rodríguez JM → Olivares M
- Ruiz-Sainz JE → de Lyra MCCP
- S**ánchez O, Ferrera I, Vigués N, García de Oteyza T, Grimalt JO, Mas J: Presence of opportunistic oil-degrading microorganisms operating at the initial steps of oil extraction and handling 119
- Sánchez S → Arenas J
- Sapp J: Two faces of the prokaryote concept 163
- Schaechter M → Maloy S
- Schaechter M: From growth physiology to systems biology 157
- Schmidt TM: The maturing of microbial ecology 217
- Sierra S → Olivares M
- Silva KT → Abreu F
- Soto T → Lapeña MA
- Soyer-Gobillard MO: Edouard Chatton (1883-1947) and the dinoflagellate protists: concepts and models 173
- T**ermens M: DOI: The "Big Brother" in the dissemination of scientific documentation 139
- Testa J: The Thomson Scientific journal selection process 135
- T**ewari JP → Mishra PK
- Turkington TK → Mishra PK
- V**ázquez F, González EA, Garabal JJ, Blanco J: Characterization of fimbriae extracts from porcine enterotoxigenic *Escherichia coli* strains carrying F6 (987P) antigen 241
- Vicente-Soler J → Lapeña MA
- Vigués N → Sánchez O
- Vinardell JM → de Lyra MCCP
- Vives-Flórez M, Garnica D: Comparison of virulence between clinical and environmental *Pseudomonas aeruginosa* isolates 247
- W**ierzchos J, Berlanga M, Ascaso C, Guerrero R: Micromorphological characterization and lithification of microbial mats from the Ebro Delta (Spain) 289
- Wright JP → Ivanova EP
- X**aus J → Olivares M

Books Reviewed in Volume 9 · 2006

Biodegradable polymers for industrial applications

Ray Smith (Ed)
Woodhead Publishing, Cambridge, UK, 2005.
ISBN 1-85573-934-8. Reviewed in 9(2), p 149

Microbe

Moselio Schaechter, John L. Ingraham, Frederick C. Neidhardt
ASM Press, Washington DC, USA, 2006
ISBN 1-55581-320-8. Reviewed in 9(1), p 75

Microbial inhabitants of humans

Michael Wilson
Cambridge Univ. Press, NY, USA, 2005
ISBN 0-521-84158-5. Reviewed in 9(2), p 145

Microbiología clínica

Guillem Prats
Ed Panamericana, Madrid, Spain, 2006
ISBN 84-7903-971-X. Reviewed in 9(1), p 77

The Revenge of Gaia. Why the Earth is fighting back —and how we can still save humanity

James Lovelock
Penguin Books, London, UK, 2006
ISBN 0-713-99914-4. Reviewed in 9(2), p 143

René Dubos, friend of the good Earth: microbiologist, medical scientist, environmentalist

Carol L. Moberg
ASM Press, Washington, D.C., USA, 2005
ISBN: 1-55581-340-2. Reviewed in 9(2), p 147

Author Index

Abel A 273

Abreu F 267

Alcalá B 273

Alexander B 259

Alexeeva YV 37

Alonso MP 103

Alonso PL 83

Arenas J 273

Ascaso C 289

Badiola I 297

Barbé J 297

Becker F 29

Beloglín RA 125

Berlanga M 95, 145, 225, 289

Bernández MI 103

Bigas A 297

Bizani D 111

Blanco J 53, 103, 241

Blanco JE 53, 103

Blanco M 53, 103

Bonatto D 111

Bou JJ 149

Borkenstein CG 253

Brandelli A 111

Cansado J 61

Capanna E 69

Cid VJ 303

Clear RM 65

Coira MA 103

Criado MT 273

Cubo MT 125

da Costa MS 199

Dahbi G 53, 103

de Lyra MCCP 125

Díaz-Ropero MP 47

Dobson ADW 281

Empadinhas N 199

Espuny MR 125

Ferreirós CM 273

Ferrera I 119

Fischer U 253

Gacto M 61

Garabal JI 241

García de Oteyza T 119

García E 61

Garnica D 247

Garrido ME 297

Gil JA 207

Gómez N 47

González EA 53, 103, 241

Grimalt JO 119

Guerrero R 75, 95, 225, 289

Harding S 143

Henriques JAP 111

Hernández-Borrell J 95

Holmes DS 306

Imhoff JF 259

Ivanova EP 37

Juárez A 103

Lapeña MA 61

Lara-Villoslada F 47

Lasa I 21

Lazo L 53

Lederberg J 155

Letek M 207

Lins U 267

Liras P 9

Lisboa MP 111

Llagostera M 297

López C 53

López R 179

López-Baena FJ 125

Madinabeitia N 125

Madrid C 103

Madrid M 61

Maldonado JA 47

Maloy S 1

Martín JF 9

Martín R 47

Martins JL 267

Mas J 119

Mateos LM 207

Mishra PK 65

Montero MT 95

Mora A 53, 103

Mora G 306

Morrissey JP 281

Navarro F 79

Nicolau DV 37

Núñez A 61

Olivares M 47

Ollero FJ 125

Ordóñez E 207

Ortoneda M 281

Pedrós-Alió C 191

Pham DK 37

Piquerás M 147, 151, 237

Power T 281

Prieto MA 154

Rhiel E 29

Rodríguez JM 47

Ruiz-Sainz JE 125

Sánchez O 119

Sánchez S 273

Sapp J 163

Schaechter M 1, 77, 157

Schmidt TM 217

Sierra S 47

Silva KT 267

Soto T 61

Soyer-Gobillard MO 173

Termens M 139

Testa J 135

Tewari JP 65

Turkington TK 65

Vázquez F 241

Vicente-Soler J 61

Vigués N 119

Vinardell JM 125

Vives-Flórez M 247

Wierzchos J 289

Wright JP 37

Xaus J 47

Key word Index

- A**ccretion 289
AFM imaging 37
ALAM Congress 306
Allochromatium vinosum 253
Anopheles spp. 83
Antibiotic biosynthesis 9
987P Antigen 241
Antimicrobial activity 111
Arsenic 207
Aspergillus fumigatus 281
ATP levels 37
Attaching and effacing *E. coli* 103
Attachment to surfaces 37
- B**acillariophyceae 29
Bacillus amyloliquefaciens 111
Bactericidal activity 297
Bacteriocin 111
Bacteriophage 179
Balanced growth 157
Bap protein 21
β-lactam antibiotics 9
β-lactam resistance 79
Bioactive peptide 111
Bioaugmentation 247
Biodegradable polymers 149
Biofilms 21, 119, 289
Biological sulfide removal 253
Biological sulfur production 253
Bioremediation 207, 247
Biosafety 247
- C***Candida utilis* 61
Capsular polysaccharide 179
c-di-GMP 21
Cell biology concepts 173
Cell viability 267
Cell wall hydrolases 179
Cellulose 21
Chlorobiaceae 259
Circadian rhythms 61
Citation Indexes 135
Clinic microbiology 77
Colonization capacity 297
Compatible solutes 199
Conserved antigens 273
Cooperation 225
Corynebacterium glutamicum 207
Crude oil 119
Cyclotella 29
- D**evelopment of microbiology 1
DGGE (denaturing gradient gel electroph.) 119
Dinoflagellates 173
DOI (Digital Object Identifier) 139
Dubos R 147
- eae** gene 103
Ebro Delta microbial mats 95
Energetic basis of life 225
Enterotoxins 53, 241
Environmental diversity 259
- EPEC, Enteropathogenic *E. coli* 53, 103
ESBP05 Symposium 154
Escherichia coli 53, 241
ETEC, Enterotoxigenic *E. coli* 53, 241
Eukaryote 163
Eukaryotic microorganisms 173
Evolution 163
- F**6 antigen 241
FEMS Congress 303
Fundación Areces Symposium 151
Fenna-Matthews-Olson protein 259
Fusarium pseudograminearum 65
- G**aia 143
GATA factor 281
Gene clusters 9
Gene flow 65
Gene *rhcJ* 125
Genetic diversity 65
Genetic recombination 65
Genomics 191, 217
GGDEF proteins 21
Gibberella coronicola 65
Glucosylglycerate 199
Graduate education 217
Grassi, Battista 69
Growth physiology 157
- H**aemophilus *parasuis* 297
Human clinical trial 47
Hyperthermophiles 199
- I**mune response 47
Immunoblotting 241
Immunogenic response 297
Immunogold-labeling electron microscopy 29
Impact Factor 135
Integrative microbiology 1
International Symposium F. Ramon Areces 151
Intimin 103
Iron metabolism 281
- L***Lactobacillus coryniformis* 47
Lactobacillus gasseri 47
Leaching 207
Light 61
Light-harvesting complexes 29
Lithification 289
Locus of enterocyte effacement 103
- M**agnetotactic multicellular prokaryotes 267
Magnetotaxis 267
Malaria 69, 83
Mannosylglycerate 199
Marine bacteria 37
Marine microbial ecology 191
Marinobacter 37
Metabolic regulation 9
Metagenomics 191
Microbe 75
Microbe's Contribution to Biology 151, 155, 225
Microbial cell biology 1
Microbial diversity 217
Microbial ecology 1, 217
- Microbial evolution 9
Micobial inhabitants of humans 145
Microbial mats 289
Microcoleus chthonoplastes 289
Multicellularity 267
- N***Neisseria lactamica* 273
Neisseria meningitidis 273
Nile red 95
Nodulation outer proteins (Nops) 125
- O**il biodegradation 119
Open Access 135
Osmotic adaptation 199
Outer membrane proteins 273
- P**athogenicity test 247
PFGE (pulsed-field gel electrophoresis) 53
Photosynthesis 29
Phototrophy 191
Phylogeny 163
PIA/PNAG 21
Planococcus 37
Plasmodium spp. 83
Poly-hydroxyalkanoates 95
Porcine diarrhea 53, 241
Pre-erythrocytic malaria vaccine 83
Probiotics 47
Prokaryote 163
Prosthecochloris 259
Proteorhodopsin 191
Pseudomonas aeruginosa 247
Pseudomonas oleovorans 95
Pseudomonas putida 95
- R**eal-time PCR 281
Ross, Ronald 69
RTS,S/AS02A malaria vaccine 83
- S**creening 95
SEM Biennial Prize 20
Siderophore 281
Sinorhizobium fredii HH103 125
Soybean 125
Spectrofluorometry 95
STEC, Shiga toxin-producing *E. coli* 53
Streptococcus pneumoniae 179
Sulfobacillus 37
Surface antigens 273
Systems biology 157
- T**axonomy 163
Thermophiles 199
Thermotolerance 61
Thomson Scientific 135
thy mutants 297
Toxic metalloids 207
Type III secretion system 125
- V**accine strains 297
Virulence factors 179
VTEC, Verotoxigenic *E. coli* 53
- Y**ear's comments 237