



INSTITUT PASTEUR

ISSN 0923-2508

# *Research in Microbiology*

*Established in 1887 as the 'Annales de l'Institut Pasteur'*

*The 120th anniversary of the Institut Pasteur*



*120 years in publishing  
Special issue*



ELSEVIER

Vol. 159



## CONTENTS

Cited/abstracted in: Biological Abstracts/Biosis, CNRS/Pascal, Current Contents (Life Sciences), Excerpta Medica/EMbase, Index Medicus/Medline, Science Citation Index.

## REVIEWS

- Emerging *Vibrio* species: an unending threat to public health in developing countries**  
E.O. Igbinosa, A.I. Okoh..... 495

- Diversity of Firmicutes peptidoglycan hydrolases and specificities of those involved in daughter cell separation**  
S. Layec, B. Decaris, N. Leblond-Bourget ..... 507

## ORIGINAL ARTICLES

*Phylogeny, ecology and population dynamics*

- A putative new order of methanogenic Archaea inhabiting the human gut, as revealed by molecular analyses of the *mcrA* gene**  
A. Mihajlovski, M. Alric, J.-F. Brugère ..... 516

- Molecular detection and phylogenetic characterization of *Gordonia* species in heavily oil-contaminated soils**  
F.-T. Shen, M.-J. Ho, H.-R. Huang, A.B. Arun, P.D. Rekha, C.-C. Young ..... 522

*Physiology and metabolism*

- Ferrous iron transport protein B gene (*feoB1*) plays an accessory role in magnetosome formation in *Magnetospirillum gryphiswaldense* strain MSR-1**  
C. Rong, Y. Huang, W. Zhang, W. Jiang, Y. Li, J. Li ..... 530

- The *Escherichia coli* AIDA-I autotransporter undergoes cytoplasmic glycosylation independently of export**  
M.-È. Charbonneau, M. Mourez ..... 537

*Molecular genetics and mobile elements*

- Construction of an improved RP4 (RK2)-based conjugative system**  
A. Babic, A.-M. Guérout, D. Mazel ..... 545

- Phylogenetic comparison of the known *Chlamydia trachomatis*  $\sigma^{66}$  promoters across to *Chlamydia pneumoniae* and *Chlamydia caviae* identifies seven poorly conserved promoters**  
B. Grech, S. Mathews, P. Timms ..... 550

*Microbes-environment interactions*

- Micro-Raman analysis and AFM imaging of *Acidithiobacillus ferrooxidans* biofilm grown on uranium ore**  
N. Pradhan, S.K. Pradhan, B.B. Nayak, P.S. Mukherjee, L.B. Sukla, B.K. Mishra ..... 557

- Catabolite repression control of flagellum production by *Serratia marcescens***  
N.A. Stella, E.J. Kalivoda, D.M. O'Dee, G.J. Nau, R.M.Q. Shanks ..... 562

- A putative *colR<sub>XC1049</sub>-colS<sub>XC1050</sub>* two-component signal transduction system in *Xanthomonas campestris* positively regulates *hrpC* and *hrpE* operons and is involved in virulence, the hypersensitive response and tolerance to various stresses**  
S.-S. Zhang, Y.-Q. He, L.-M. Xu, B.-W. Chen, B.-L. Jiang, J. Liao, J.-R. Cao, D. Liu, Y.-Q. Huang, X.-X. Liang, D.-J. Tang, G.-T. Lu, J.-L. Tang ..... 569