



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



ELSEVIER

Vol. 159, No. 6, July-August, 2008

CONTENTS



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

REVIEW

Biophysical approaches to study the dynamic process of bacterial adhesion
K. Otto..... 415

ORIGINAL ARTICLES

Phylogeny, ecology and population dynamics

ribB and ribBA genes from *Acidithiobacillus ferrooxidans*: expression levels under different growth conditions and phylogenetic analysis
F.H.P. Knegt, L.V. Mello, F.C. Reis, M.T. Santos, R. Vicentini, L.F.C. Ferraz, L.M.M. Ottoboni..... 423

Mold species in dust from the International Space Station identified and quantified by mold-specific quantitative PCR
S.J. Vesper, W. Wong, C.M. Kuo, D.L. Pierson..... 432

Multilocus sequence typing of *Candida albicans* isolates from animals
M.D. Jacobsen, M.-E. Bougnoux, C. d'Enfert, F.C. Odds..... 436

Characterization of *Borrelia burgdorferi* sensu lato isolates by pulsed-field gel electrophoresis after MluI restriction of genomic DNA
E. Ružić-Sabljić, A. Zore, F. Strle 441

Physiology and metabolism

Temperature dependence of mycosubtilin homologue production in *Bacillus subtilis* ATCC6633
P. Fickers, V. Leclère, J.-S. Guez, M. Béchet, F. Coucheney, B. Joris, P. Jacques 449

Cyclopropane fatty acids improve *Escherichia coli* survival in acidified minimal media by reducing membrane permeability to H⁺ and enhanced ability to extrude H⁺
L. Shabala, T. Ross..... 458

Cloning, expression, and characterization of two novel cuticle-degrading serine proteases from the entomopathogenic fungus *Cordyceps sinensis*
Y. Zhang, X. Liu, M. Wang..... 462

Interaction between microbes

Surface-bound proteins of *Lactobacillus plantarum* 423 that contribute to adhesion of Caco-2 cells and their role in competitive exclusion and displacement of *Clostridium sporogenes* and *Enterococcus faecalis*
K. Ramiah, C.A. van Reenen, L.M.T. Dicks 470

Interaction of microbes with their environment

Pathogen-derived nitric oxide influences formation of the appressorium infection structure in the phytopathogenic fungus *Blumeria graminis*
E. Prats, T.L.W. Carver, L.A.J. Mur..... 476

Characterization and transcriptional analysis of two gene clusters for type IV secretion machinery in *Wolbachia* of *Armadillidium vulgare*
C. Félix, S. Pichon, C. Braquart-Varnier, H. Braig, L. Chen, R.A. Garrett, G. Martin, P. Grève..... 481

An *Escherichia coli* asr mutant has decreased fitness during colonization in a mouse model
J. Armalyté, V. Šeputienė, Ö. Melefors, E. Sužiedėlienė 486