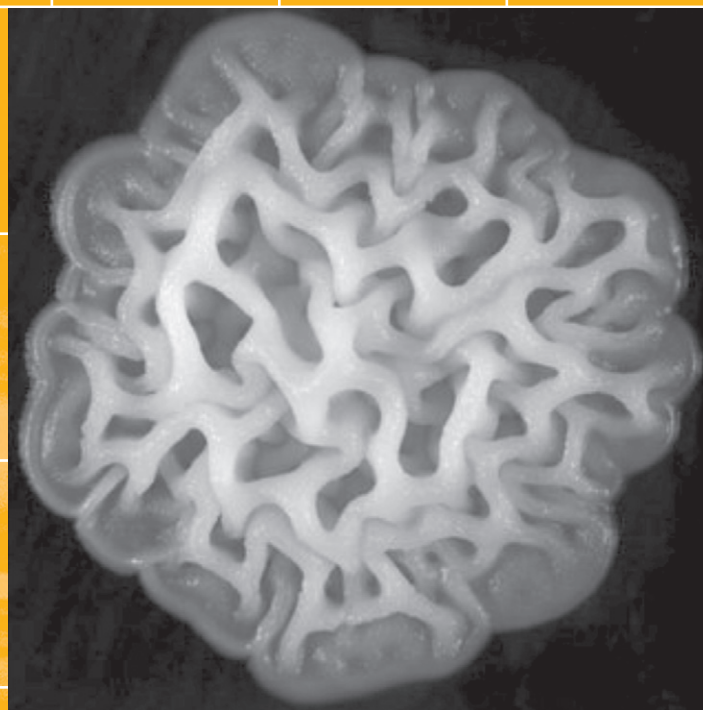


Current Opinion in Microbiology

Volume 14, issue 6
December 2011
ISSN 1369-5274

Julian Davies & Pascale Cossart, Editors



December 2011

Growth and development: eukaryotes

Edited by Joseph Heitman

Growth and development: prokaryotes

Edited by Martin Thanbichler

February 2012 Host–microbe interactions: bacteria

April 2012 Cell regulation

June 2012 Ecology and industrial microbiology • *Special section*: Microbial proteomics

August 2012 Host–microbe interactions: fungi/parasites/viruses

October 2012 Antimicrobials • Genomics



Access *COMB* articles online up to one month before they appear in your print journal www.sciencedirect.com

**CURRENT
OPINION**
www.current-opinion.com

CONTENTS

Abstracted/indexed in: BIOSIS, CAB Abstracts International, CAB Health, Chemical Abstracts, EMBASE, Medline. Also covered in the abstract and citation database SCOPUS®. Full text available on ScienceDirect®

Growth and development: eukaryotes

Edited by Joseph Heitman

- 631 **Joseph Heitman**
Editorial overview: Diversity in the realm of eukaryotic microbe form and function
- 634 **James G Umen**
Evolution of sex and mating loci: An expanded view from Volvocine algae
- 642 **Miguel A Lopez, HoangKim T Nguyen, Michael Oberholzer and Kent L Hill**
Social parasites
- 649 **Paul S Dyer and Céline M O’Gorman**
A fungal sexual revolution: *Aspergillus* and *Penicillium* show the way
- 655 **Huei-Mei Chen and Aaron M Neiman**
A conserved regulatory role for antisense RNA in meiotic gene expression in yeast
- 660 **Gero Steinberg**
Motors in fungal morphogenesis: cooperation versus competition
- 668 **John R Collette and Michael C Lorenz**
Mechanisms of immune evasion in fungal pathogens
- 676 **Joshua A Granek, Ömür Kayıkçı and Paul M Magwene**
Pleiotropic signaling pathways orchestrate yeast development
- 682 **Deborah A Hogan and Fritz A Muhlschlegel**
Candida albicans developmental regulation: adenylyl cyclase as a coincidence detector of parallel signals

Growth and development: prokaryotes

Edited by Martin Thanbichler

- 687 **Martin Thanbichler**
Editorial overview: Good things come in small packages: Subcellular organization and development in bacteria

- 691 **Clare L Kirkpatrick and Patrick H Viollier**
New(s) to the (Z-)ring
- 698 **Tsuyoshi Uehara and Thomas G Bernhardt**
More than just lysins: peptidoglycan hydrolases tailor the cell wall
- 704 **Rachael M Barry and Zemer Gitai**
Self-assembling enzymes and the origins of the cytoskeleton
- 712 **Florian Szardenings, David Guymer and Kenn Gerdes**
ParA ATPases can move and position DNA and subcellular structures
- 719 **Christine Kaimer and Peter L Graumann**
Players between the worlds: multifunctional DNA translocases
- 726 **Iryna Bulyha, Edina Hot, Stuart Huntley and Lotte Søgaard-Andersen**
GTPases in bacterial cell polarity and signalling
- 734 **Mostyn T Brown, Nicolas J Delalez and Judith P Armitage**
Protein dynamics and mechanisms controlling the rotational behaviour of the bacterial flagellar motor
- 741 **Elizabeth Anne Shank and Roberto Kolter**
Extracellular signaling and multicellularity in *Bacillus subtilis*

The cover

A colony of an environmental isolate of budding yeast (*Saccharomyces cerevisiae*) grows under nutrient stress. How individual yeast cells interact to form these macroscopic, multicellular structures is an active area of research; cell-cell adhesion and an extracellular matrix seem to play important roles. Accumulating evidence indicates that these architecturally complex colonies are a form of fungal biofilm, and reproducible strain-to-strain variation has primed this complex phenotypic response to be a model for dissecting the genetic architecture of nutrient response networks. (Photo credit: Joshua Granek.)