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REVIEWS

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MICROBIOLOGY

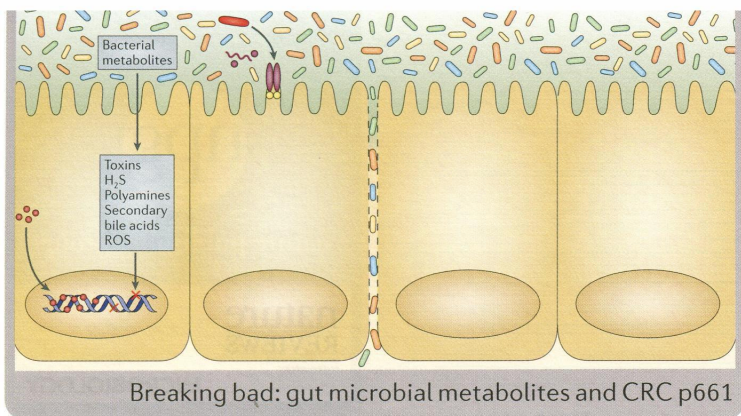


ALOHA!

Ecological paradigms from the Hawaii
Ocean Time-series

The good, the bad, the ugly

Microbial metabolites and
colorectal cancer



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REVIEWS

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FEATURED
ARTICLE

The gut microbiota, bacterial metabolites and colorectal cancer

Petra Louis, Georgina L. Hold and Harry J. Flint

Accumulating evidence suggests that the gut microbiota has a role in the aetiology of colorectal cancer (CRC). In this Review, Flint and colleagues discuss the complex interplay between diet, the microbiota and microbial metabolites and argue that the combined metabolome of the microbiota has both protective and detrimental effects on inflammation and the progression of CRC.

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Orthobunyaviruses: recent genetic and structural insights

Richard M. Elliott

Orthobunyaviruses are transmitted by arthropod vectors and can infect humans, animals and crops. In this Review, Elliott describes recent genetic and structural advances that have revealed important insights into the composition of orthobunyavirus virions, viral transcription and replication, and viral interactions with the host innate immune response.

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Master recyclers: features and functions of bacteria associated with phytoplankton blooms

Alison Buchan, Gary R. LeCleir, Christopher A. Gulvik and José M. González

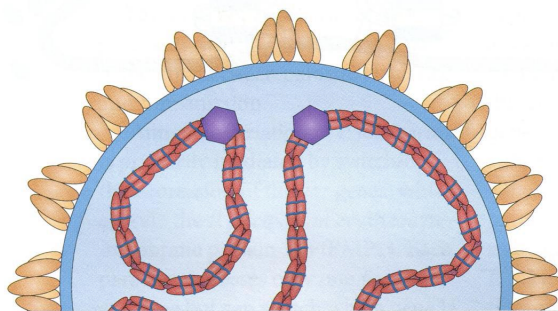
Marine phytoplankton blooms are annual spring events that are accompanied by a surge in heterotrophic bacteria, primarily roseobacters, flavobacteria and members of the Gammaproteobacteria, which recycle most of the carbon that is fixed by the primary producers. In this Review, Buchan *et al.* describe the emerging physiological features and functions of these bacterial communities and their interactions with phytoplankton.

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Microbial oceanography and the Hawaii Ocean Time-series programme

David M. Karl and Matthew J. Church

The Hawaii Ocean Time-series programme recently completed 25 years of continuous operation. Matthew Church and David Karl look back on some of the major discoveries that have come from this long-term programme and its contribution to our evolving understanding of microbial oceanography.



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On the web www.nature.com/reviews/micro

Advance online publication

We operate an advance online publication (AOP) service for authors and readers to view the latest articles published online ahead of print.

Forthcoming articles:

Eradicating HIV-1 infection: seeking to clear a persistent pathogen
Nancie M. Archin, Julia Marsh Sung, Carolina Garrido, Natalia Soriano-Sarabia and David M. Margolis

Novel vaccine vectors for HIV-1

Dan H. Barouch and Louis J. Picker

A fundamental mechanistic theory to explain the efficacy of antiretroviral therapy
Sarah B. Laskey and Robert F. Siliciano

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SERIES ON VECTOR-BORNE DISEASES

In this article series, *Nature Reviews Microbiology* highlights the distinct features of a range of vector-borne pathogens and the diseases they cause, as well as how the host responds to these infections. All articles in the series can be found at <http://www.nature.com/nrmicro/series/vectorbornediseases/index.html>

Links to further information

The full text of articles includes author biographies, links to glossary terms and links to websites and databases with relevant information.

Key points provides a bullet-pointed summary of the main topics covered in each article.

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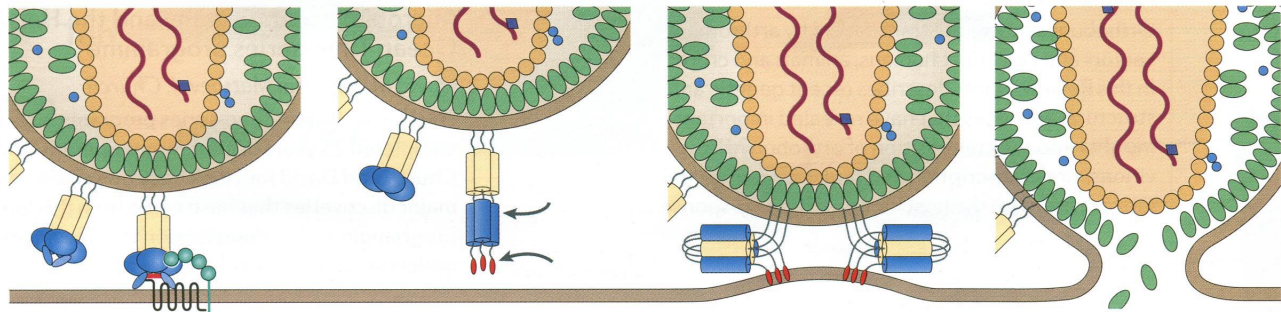
659 **Genome watch** Buzz off, that's my bee!

PERSPECTIVES

INNOVATION

715 **Discovery of modulators of HIV-1 infection from the human peptidome**

Jan Münch, Ludger Ständker, Wolf-Georg Forssmann and Frank Kirchhoff
Kirchhoff and colleagues discuss the discovery of novel antimicrobial peptides by systematic screening of complex peptide and protein libraries that have been derived from human bodily fluids and tissues, with a focus on the isolation of endogenous agents that affect HIV-1 infection.



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