



Prelab: Scientific Literature

Purpose

Obtain a high level overview of metagenomics by reading R.D. Sleator, C. Shortall, and C. Hill. Metagenomics. Letters in Applied Microbiology. 2008 Nov;47(5):361-6. (pubmed.gov/19146522)

Learning Objectives

1. Read a review paper that summarizes the field of metagenomics.
2. Engage with the content by finding something interesting and new, and asking a question.

Introduction

The vast majority of all micro-organisms on Earth remain uncultured ([K.G. Lloyd et al, 2019](#)). Additionally, in complex environments like soil and water, most micro-organisms remain unidentified ([M. Delgado-Baquerizo, 2019](#)). The field of metagenomics is a culture-independent approach which aims to remedy these gaps in knowledge ([J. Handelsman, 2004](#)). Metagenomics is the study of genomic (sequencing) data obtained directly from environmental (and other, e.g. clinical) samples and provides new meaningful information on the diversity and function of microorganisms.

Activity

Estimated time: 50 min

Instructions

Read the review paper “Metagenomics” by Sleator, Shortall, and Hill, 2008 Lett Appl Microbiol and answer the following questions.

Questions

1. What is one thing you learned or find interesting in the paper?

2. Define a term that is new to you (e.g. metagenome, microbiome, 16S rRNA).

3. Ask a question about the review paper.



Grading Criteria

- Download as Microsoft Word (.docx) and upload on Canvas

Footnotes

Resources

- [Google Doc](#)

Contributions and Affiliations

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