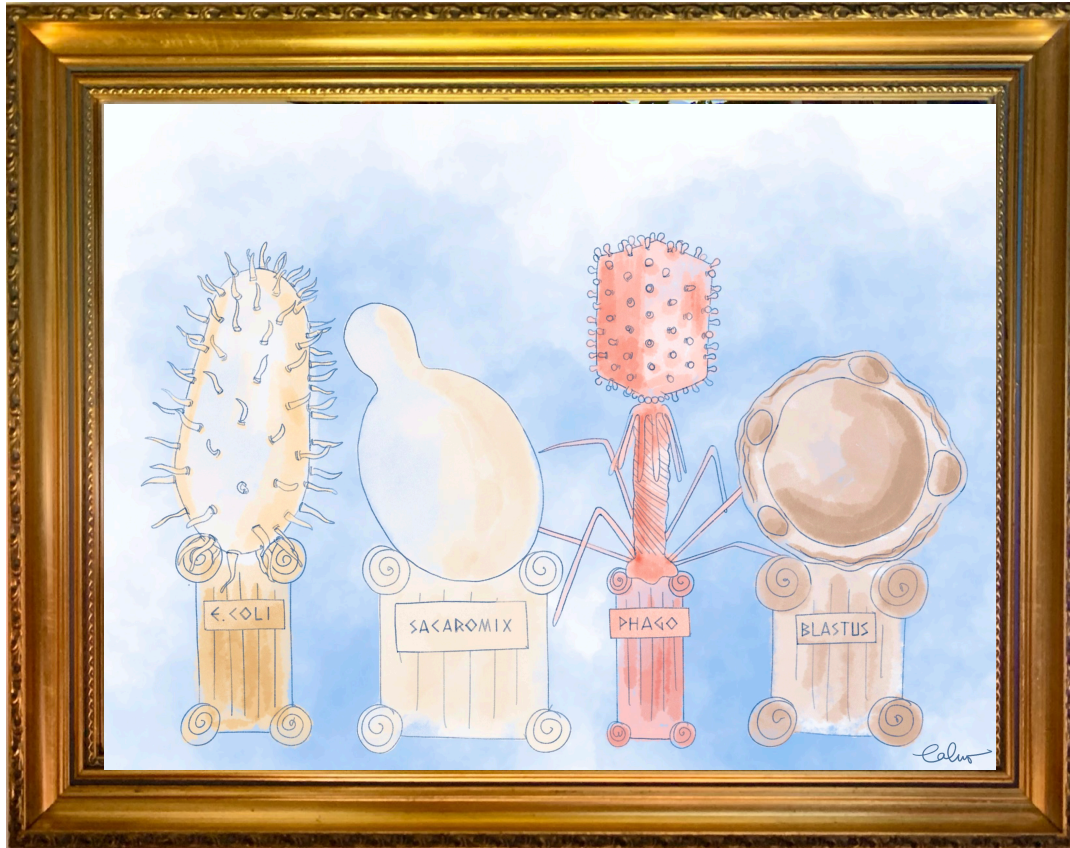


MicrobiomeRogues Gallery

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All organisms are covered in microbes that provide a range of services essential to the life and activities of the 'host'. For example, microbes help us digest food materials we cannot digest ourselves. A human being consists of approximately 50% human cells and 50% microbial cells: our *microbiomes*. We (and all other organisms) and our microbiomes are *meta-organisms* or *holobionts* because we are an essential partnership and operate as a functional unit. Human microbiomes are highly diverse, consisting of about 1000 species (humans are one species!) of bacteria, archaea, yeasts and other eukaryotes, and viruses. They also represent an amazing genetic diversity – human cells contain about 20,000 genes, whereas the microbiome may have around 2,000,000 genes – which is why microbiomes can provide us with such an amazing diversity of services. But, just like communities of humans, this diversity also includes a few less supportive, less pleasant microbes: *the microbiome rogues*. And, just like communities of humans, the less well-mannered microbes may either hide and go unnoticed or become very obviously unpleasant, depending on circumstances. Let's get to know the rogues that are part of our microbiomes, and the circumstances that encourage them to be unpleasant, in order to be able to understand and handle them better, and reduce the discomfort they cause us.