

3. The skin microbiome: current perspectives and future challenges.

Chen YE, Tsao H.

Complex communities of bacteria, fungi, and viruses thrive on our skin. The composition of these communities depends on skin characteristics, such as sebaceous gland concentration, moisture content, and temperature, as well as on host genetics and exogenous environmental factors. Recent metagenomic studies have uncovered a surprising diversity within these ecosystems and have fostered a new view of commensal organisms as playing a much larger role in immune modulation and epithelial health than previously expected. Understanding microbe-host interactions and discovering the factors that drive microbial colonization will help us understand the pathogenesis of skin diseases and develop new promicrobial and antimicrobial therapeutics.

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<http://www.ncbi.nlm.nih.gov/pubmed/23489584>