PROPOSITIONS

A Functional Perspective on probiotic Interventions in the Small Intestine: Dynamics and Emergent Properties of the Microbial Community

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1.The functional properties of probiotics should be complementary to the functional profile of the targeted microbiota.

2. The small intestinal microbiota can be studied using ileostoma effluent.

3. Microbial mechanisms obtained utilizing synthetic microbial communities can be extrapolated to the complex microbiota.

4. In silico methods are unavoidable for the development of personalized microbiota targeted interventions.

5. Emergent properties arising from interactions in complex systems are underappreciated.

6. Without knowing the absolute abundance per species, relative abundance comparisons should be taken with a grain of salt.

7. The term “Dysbiosis” is too vaguely defined in the microbiome field.

8. Microbiota researchers need to embrace ecological and evolutionary principles obtained from other areas of research.

9. Western science is and has long been too deterministic.