Editorial

Over the last decade the interest in the sixth gastrointestinal organ, the microbiome, has literally exploded, and new data are published on a monthly basis in high-ranked journals. Gut microbiota interfere with many of the human functions and provide an essential contribution to health as well as to the development of diseases.

The relationship between the gastrointestinal microbiome and the human host is bi-directional. Human lifestyle and in particular nutrition have a profound impact on the gastric microbiota composition, which in return contributes to the host's well-being.

Gut microbiota and the human immune system co-evolve from childhood over the whole lifespan. In addition, gastrointestinal microbiota contribute in an important way to digestive metabolic and trophic processes of the gastrointestinal tract. In an ideal state of equilibrium, the various bacterial phyla (also fungi and viruses) represent a consortium of eubiosis. However, this state can be offended by a variety of perturbations (i.e. nutritional, antibiotics) and may turn into dysbiosis and disease.

In this issue of *Gastrointestinal Tumors*, selected aspects on the role of gut microbiota in digestion are presented, providing an excellent update on this fascinating topic. We are embarking on understanding digestive diseases and learning about the potential of how to make use of therapies directed to gut microbiota with the intention of curing diseases.

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