

During the past 23rd International Symposium on Glycoconjugates, Dr. Tim Spector presented in a plenary lecture his current and previous research about twins in the UK, with impressive results that are helping to understand how much is the genotype accounting for certain traits or conditions. An example of such is myopia in Taiwan. As he cleared although the environmental component just accounts for 10% of variability, and the genetic component accounting for the highest part of it [1], the rate of myopia in children is much higher than expected. In this case the environmental conditions are forcing the phenotype. Besides those interesting results, he presented the new direction in his research, the study of the gut microbiota within the British Gut project.

is one and the American Gut project, can both give an idea of the importance of gut microbiota for biomedicine nowadays. Although in early experimental phases in many cases, the interest of the scientific community is growing and the steps to its consolidation are steady.

We cannot forget that the gastrointestinal tract is directly involved in the absorption of orally administered drugs, and the potential effect that they may have over the human gut microbiota should be carefully evaluated [2], because some components could alter the population resulting in dysbiosis [3]. This is important, because the human gut microbiota has been shown to have a very important role for health and the normal immune system activity [3,4], besides it has potential applications as biomarker, either the gut one, or the bacterial oral community [5,6].

Understanding how does microbiota work is relevant for the development of new drugs, not only to know if our treatment is affecting the balance of microbiota, but also because we could use some type of antimicrobials or probiotics in order to modulate the levels and balance in the bacterial population [7]. In this sense, new drug formulations could include these extra components in order to control certain populations, or increase the ratio of certain ones.

A new type of clinical practice is the transplantation of microbiota from healthy donors, which is currently used only in cases of patients infected with *Clostridium difficile* that do not respond to standard treatments of antibiotics [6]. This is new developments as an alternative

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