Gut microbiota and the irritable bowel syndrome: A further link between the big brain-little brain axis

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Functional gastrointestinal disorders, including constipation, irritable bowel syndrome and diarrhea are extremely frequent conditions, affecting up to 30% of people in industrialized countries. These conditions have been considered for a long time mood disorders. However, there is clear recognition that peripheral and environmental factors as well as the intestinal microbiota participate to their pathophysiology. Subsets of patients develop these conditions after a bout of infectious gastroenteritis, there is substantial evidence indicating that microbiota manipulation with dietary intervention and probiotics can ameliorate symptoms, likely acting on intestinal homeostasis and by reducing microscopic inflammation. The field is also expanding rapidly beyond the gut with exciting data indicating that gut microbiota by modulating the gut-brain axis is involved in the development of anxiety and depression and behavioral responses implying a potential role of microbiota also on the central component associated with functional bowel disorders.

Biography
Giovanni Sarnelli graduated Summa cum Laude in Medicine and he qualified in Gastroenterology at the University “Federico II” of Naples, Italy. He was trained partly at the KUL of Leuven, Belgium where he completed his PhD and his Post-doctoral research fellowship at the University of Bologna, Italy. Currently he is involved in clinical gastroenterology diagnostic and therapeutic endoscopy, teaching and research at the Department of Clinical Medicine and Surgery of the University “Federico II” of Naples. His main research interests relate to basic and clinical aspects of functional gastrointestinal disorders, neurogastroenterology and gut microbiota. He has authored more than 50 indexed peer-reviewed articles and reviews on these topics, published in various biomedical journals.