

Editorial

Editorial for Austin Journal of Pediatrics

Anthony Loizides*

Division of Pediatric Gastroenterology and Nutrition,
Albert Einstein College of Medicine, USA

***Corresponding author:** Anthony Loizides, Division of
Pediatric Gastroenterology and Nutrition, Albert Einstein
College of Medicine, Fax: 7185155426; Tel: 7187412332;
Email: ALOIZIDE@montefiore.org

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Editorial

It is an honor and a privilege to be asked to be part of the editorial team for the newly formed journal, The Austin Journal of Pediatrics, a publication of the Austin Publishing Group. As a pediatric gastroenterologist consultant practicing in the United States, I know that it is important to continue advancing research to improve pediatric gastrointestinal, hepatologic and nutritional health. Pediatric gastroenterology is a relatively young specialized medical field [1] having emerged in the 1960's [2]. Numerous scientific advances have moved it toward a greater appreciation of the molecular and genetic mechanisms of gastrointestinal health and disease as well as the development of new knowledge for the assessment and treatment of the pediatric population. Additionally, there has been a growing importance in translating scientific findings to patient care, quality improvement, and the enhancement of healthcare assets to further the care of children with common gastroenterological diseases, such as constipation, to those who have complex congenital or acquired entities. Forefront of this progress is the study of genomics that will enable specific and prognostic advances towards a multitude of diseases. By evaluating the genetics of a disease, improving patient care, including preventive care, will become key opportunities [3]. For example, the understanding of the intestinal microbiome is advancing rapidly due to microbial computational genomics. There is roughly one hundred times more genetic material from microbes in our bodies as compared to our own genes. This microbial genetic material contributes to energy metabolism [4] as well as the development of the human immune system [5] as there is a active interaction between the human intestinal environment and the microbiome. Various factors from this relationship contribute to an individual's health and the individual's predisposition as well as attainment of disease. It is likely that we will be able to develop specific measures to prevent and treat diseases associated with the intestinal microflora. Indeed, the "future is already here" by exploiting the microbiome through Fecal Microbiota Transplantation (FMT) [6] as fecal bacteriotherapy. The value of this therapy has been seen in chronic constipation and irritable bowel syndrome [7], inflammatory bowel disease (IBD) [8], metabolic syndrome [9], and even in neurologic diseases such as Parkinson's, multiple sclerosis, myoclonus dystonia, fibromyalgia, chronic fatigue syndrome, and autism [6]. From the molecular level – a relatively new specialty – neurogastroenterology -has advanced the diagnosis and treatment of pediatric gastrointestinal motility disorders [10] and from epidemiologic studies, we have recognized

the importance of controlling the epidemic of pediatric obesity as greater rates have expanded the prevalence of non-alcoholic fatty liver disease [11]

According to the Pediatric Gastroenterology Research Agenda of the North American Society of Pediatric Gastroenterology, Hepatology and Nutrition (NASPGHAN) published in 2013 [12], seven key clinical categories of study have been identified: Inflammatory Bowel Disease, Functional and Motility, Liver, Pancreatic and Nutritional Disorders, Intestinal Failure and Infection as well as Allergy. Following clinical, molecular, and health care cost outlooks, various areas within the seven key clinical categories have been emphasized as research priorities. As a whole these are: to determine the burden and natural history of various gastrointestinal diseases, to improve our understanding of underlying mechanisms of disease, to examine the causes, to develop models that foresee complications and guide ideal management, to develop new markers of disease activity, to identify novel, alternative therapies and to identify factors associated with abnormal or impaired psychological and social function. The agenda is a concise article, written for a nonprofessional audience by experts from the NASPGHAN membership and it emphasizes the important research needs in the field of pediatric gastroenterology. It is the hope that not only will it spur research interests in physicians, but also used to advocate for the research support needed to advance the diagnosis, care, and treatment of our patients towards the general public, hospital leaders and even representatives at all levels of government [13].

Advocating for patient's care at the legislative level is most notably seen in the NASPGHAN's battle against neodymium magnets that are high powered and cause serious health problems if ingested. They can attract each other from a significant distance and their attractive force can cross loops of bowel thereby leading to obstruction, perforation and eventual intestinal resection. Because the use of warning labels had not been effective in preventing their ingestion, NASPGHAN had called for a ban on the sale of these magnet sets [14]. Ultimately, The U.S. Consumer Product Safety Commission (CPSC) with the influence of NASPGHAN, in cooperation with six retailers, announced the voluntary recall of these high-powered magnet sets [15]. So great was the concern about magnet ingestion that in July of 2012 the CPSC staff filed an administrative complaint against one company after deliberations were unsuccessful to result in a voluntary recall plan that was considered by the CPSC to be acceptable to address the product's danger. This type of court case against a company is unusual, as CPSC has filed only four administrative complaints in the past 11 years. The case action is still ongoing [16].

My particular interest is in the medical care, particularly the gastrointestinal care, of children with neurodevelopmental delays, genetic and metabolic syndromes. As part of the Rett Syndrome Center at The Children's Hospital at Montefiore, for example, it has been a pleasure to take care of the children who suffer from chronic illness. I have learned a lot from them and their families and continue to learn about the various GI entities they are diagnosed with. The GI

issues, particularly in Rett, encompass nearly of the GI subspecialties – from issues with nutrition, feeding, motility to biliary tract disease. More discoveries are made every day and it is the hope that we can optimize the health and nutrition of these fragile children.

It is my wish that The Austin Journal of Pediatrics will provide an international forum for clinicians. With the help of collaborators worldwide, I believe that the journal will disperse scientific and clinical communication, but also help in discussion of thought-provoking opinions. I deem that the goal is to contribute to the progress in the practice and research of our specialty. I also desire that every possible effort will be made to encourage relations with pediatricians in all countries to provide a channel of information concerning developments in pediatrics throughout the world. Almost all pediatric services regularly intersect with one another and it is important to maintain a close bond with both generalist and subspecialist colleagues so that we may link new discoveries to the care and well being of the population we attend to. The stimulus to find cures for common and rare pediatric disease will come through concerted and multi-center proposals, as well as the development and assessment of new tools improve our knowledge of the pathogenesis of specific conditions.

As it was originally stated in 1948 in the newly published journal, Pediatrics, “Every reader of this journal should realize he or she has a share-no matter how large or how small.”[17].

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