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Exciting times for gastrointestinal microbiology

Gail Hecht[1,*] and Eva M. Riedmann[2,*]

[1]University of Illinois; Chicago, IL USA; [2]Landes Bioscience; Vienna, Austria

Dear Reader,

This is an exciting time for gastrointestinal microbiology. The recognition of *Helicobacter pylori* and its role in gastrointestinal disease earned a Nobel prize; the discovery of bacterial secretion systems and translocated effectors has unlocked numerous mechanisms of pathogenesis; the role of the commensal flora in many disease states, including inflammatory bowel disease, irritable bowel syndrome, and even obesity, is now accepted and will undoubtedly lead to new therapeutic strategies; the finding that eukaryotic cells perceive and respond to bacteria through the expression of Toll-like receptors and Nods is a major step toward understanding interactions between the host and gut microbiota or microbial pathogens; the discovery of quorum sensing as a means of communication between bacterial populations and even with host cells has provided insight into pathogenic mechanisms; and the recently NIH-initiated Human Microbiome Project will allow better understanding of the role of this complex intestinal community in human health and disease. On the clinical side, we are witnessing the emergence of more virulent strains of enteric pathogens, are beginning to explore the use of probiotics in the treatment of medical disorders, and are made increasingly aware of the presence of gut pathogens through the widespread outbreaks of foodborne illnesses. In short, this is the era of the gut!

As such, we are pleased to start 2010 with the launch of *Gut Microbes*, an international peer-reviewed journal that focuses exclusively on microorganisms populating the intestine, both commensals and pathogens. We believe that this new journal is both timely and important. There is a clear need for interdisciplinary research and a publication that brings together scientists, clinical researchers and physicians who work on diverse aspects of the gut microbiota.

In contrast to many other journals that focus either on basic or clinical research, *Gut Microbes* is determined to become a true multi-disciplinary journal. We will draw clinicians and researchers together on all aspects of microorganisms populating the intestine. This novel approach is essential to address new infectious challenges such as emerging infectious agents and antimicrobial resistance. Clinicians and researchers have much to learn from one another. Understanding the molecular mechanisms of the infection process can help clinicians and clinical researchers rationalize their therapeutic approach, while recognizing the clinical priorities can greatly help basic researchers focus on the infectious processes that cause the highest degree of human suffering. We hope to see the clinical implications of basic research presented along with studies on the molecular mechanisms of the host-pathogen interaction.

Naturally we are interested in basic research on enteric pathogens (including viruses, bacteria, fungi and parasites) and the virulence factors involved in pathogenic processes for instance adhesion, colonization and invasion. The identification of novel virulence factors and the characterization of the molecular and biological function of known virulence factors, as well as the harnessing of microbial strategies for treatment of human disease will be published.

All aspects of gastrointestinal (GI) infection and disease will be covered, such as diagnostic testing for GI disease, the role of commensal flora in GI disease and animal models of GI infection or GI disease with a microbial component. On the other hand, we will also report on mutually beneficial interactions between members of our vast community of friendly gut microorganisms and host cells, highlighting the protective effects of pre- and probiotics. Other topics of interest include defining and profiling of the gut microbiome, biofilm formation and quorum sensing.

On the clinical side, we are interested in the role of the gut microbiome in GI disease, such as inflammatory bowel disease, irritable bowel syndrome, GI cancers, obesity and autoimmune disease. Clinical trials evaluating all aspects of the infection process, probiotics and antibiotics as well as vaccine development and evaluation will be published. Other topics include novel case reports and treatments of GI disease as well as ramifications and epidemiology of GI infections.

We intend to focus on original research, which is only possible with your help. We invite you to send us your original manuscripts on basic, translational and clinical research. We understand the need for prompt feedback and will therefore provide you with a timely evaluation of your manuscript. *Gut Microbes* will also include solicited content including timely Reviews, Commentaries and Article Addenda that provide context for the work presented in *Gut Microbes* and for key results published elsewhere. We are well aware that any journal is only as good as its authors, and we will continuously work to improve the acknowledgment and reputation of *Gut Microbes* by the research community.

Fortunately, we will be supported in this endeavor by a fine selection of internationally recognized experts who have agreed to serve as Associate Editors or Editorial Board members. Our Board includes scientists, clinical researchers and physicians from all over the world who, like us, believe that there is indeed a need for a new publication that fosters communication and allows rapid exchange of information in the field of gut microbes.

Correspondence to: Gail Hecht; Email: gahecht@uic.edu / Eva M. Riedmann; Email: eva@landesbioscience.com
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We are much looking forward to the challenge of launching this new journal and introducing it to the community! Your suggestions and comments are always welcome!

Sincerely,

Gail Hecht, M.D.
Editor-in-Chief

Eva M. Riedmann, Ph.D.
Acquisitions Editor