

## FUNCTIONAL MEDICINE UPDATE

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### **The Functional Microbiome: A Clinician's Perspective**

This issue is Part 3 in Dr. Bland's series about the gut microbiome; the series will conclude next month. This month, Dr. Bland focuses on how clinicians are integrating information about the microbiome into clinical practice. He interviews Dr. Robert Rountree, who is a long-time functional medicine practitioner. Dr. Rountree is on the teaching faculty for the Institute for Functional Medicine, and earlier this year he was awarded the 2015 Linus Pauling Functional Medicine Award.

### **Clinician/Researcher of the Month**

**Robert Rountree, MD**

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Dr. Robert Rountree is a board-certified family practitioner who has established his private practice, Boulder Wellcare, in Boulder, Colorado. He is a diplomate of the American Board of Holistic Medicine, and he has extensively studied nutritional and herbal pharmacology. Dr. Rountree is considered a thought leader in the area of human ecology and has been caring for patients using the principles of functional medicine for several decades.

Dr. Rountree sees patients on a daily basis, and Dr. Bland begins their discussion by asking him how he explains the microbiome and its role in health to individuals who may be unfamiliar with the importance of gut bacteria. Dr. Rountree describes the approaches he uses to explain the concept of human ecology in positive and easy-to-understand ways. He and Dr. Bland go on to discuss how several gut-related conditions—dysbiosis, leaky gut, and endotoxemia among them—have taken decades to gain acceptance and respect. Dr. Rountree explains these conditions in more detail and discusses the approaches he takes to them in his clinical practice. He is an advocate for DNA analysis of stool and currently uses this option as a clinical tool, but would like to see this field advance rapidly given the amount of useful information it can provide to practitioners.

Dr. Bland and Dr. Rountree discuss specific dietary approaches and supplements that can influence the biodiversity of the gut microbiota. Dr. Rountree describes results he has seen in the patients he treats, and he also talks about the challenges that often arise when trying to find the right balance for certain individuals—for example, those who do not digest carbohydrates well. He describes natural sources he has used in situations where certain supplements were not tolerated by patients.

In addition to his other areas of interest, Dr. Rountree is an expert in the body's detoxification systems. He and Dr. Bland have a discussion about the cytochrome P450 mixed oxidation Phase 2 conjugation

systems and their interrelationship with gallbladder bile acid secretion. They also discuss fatty liver disease, which is now thought to affect up to 20 percent of the population. Dr. Rountree discusses his toolkit, which includes such things as n-acetylcysteine, alpha-lipoic acid, curcumin, and sulforaphane. They discuss the pursuits of the pharmaceutical industry to develop new drugs for conditions that may be treatable through readily available natural products.

Both Dr. Bland and Dr. Rountree agree there is a need to create greater awareness about gastrointestinal health among the general population. Like Dr. Martin Blaser—who was interviewed for Part 2 of this series—Dr. Rountree feels that it is essential to address the critical importance of birth practices in starting children off in life with healthy gut ecology. He also feels that translating the importance of intestinal biodiversity into easy-to-understand dietary practices—such as eating less refined food—is key to increasing public awareness about the microbiome and systemic health.

### References

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