Nutrigenomics – Opportunities in Asia
Nutrigenomics – Opportunities in Asia

Volume Editors

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26 figures, 1 in color, and 10 tables, 2007
This book is dedicated to the international community of scientists who believe in the promise of nutrigenomics!
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Nutrition plays an important role in optimizing human health and managing disease. Unfortunately, the human response to diet is so incredibly variable that nutritional counseling beyond that of general advice is a complex and challenging task. Nutrigenomics seeks to understand the variability of the individual’s response to food and the underlying mechanisms whereby foods exert their health-promoting activities. The promise of nutrigenomics is that with a deeper molecular understanding of nutrition we may some day be able to design diets that truly maximize an individual’s potential for health and wellness.

Asia is home to two thirds of the world’s population. Many societies within Asia are undergoing rapid socioeconomic development and are experiencing an attendant transition in diet-related morbidity and mortality. Paradoxically, the problem of under- and overnutrition coexists in Asia. This, combined with the tremendous diversity in diet, dietary intake patterns, local culture, and nutritional needs, makes the identification and provision of an optimal diet relevant to all the people living in Asia an extraordinary challenge. This same diversity, however, provides opportunities to ask and answer scientific questions which cannot be investigated elsewhere in the world.

Recognizing the special nutrition science research opportunities afforded in Asia, the International Life Sciences Institute (ILSI) hosted an exciting 3-day meeting in Singapore on December 7–9, 2005. This conference enjoyed the support and guidance of the Commonwealth Scientific and Industrial Research Organization of Australia, the National Institutes of Health in the United States, and the Genome Institute of Singapore. The first ILSI international conference on nutrigenomics, with a focus on opportunities in Asia, was an international
gathering of scientists from the academia, government and industry that attracted speakers and attendees from around the world with everyone coming to share their experience and knowledge in the area of nutrigenomics. This book is a culmination of the efforts of all those who organized and participated in this conference.

The book includes an elegant and articulate summary of the conference that Rodolfo Florentino was kind enough to provide and closes with an invited article by Jim Kaput that provides a road map for international collaboration in nutrigenomics. The core of the book starts off with concepts and methods in nutrigenomics designed to give those interested in this field a general overview; this is followed by specific examples of the applications of these concepts and methods to specific disease states. Unfortunately, it was not possible to include all the presentations from the meeting. Respectful apologies are offered to those speakers and presenters whose work could not be included, but without whose participation the meeting could not have been such a success!

For those of you who were able to attend the meeting we hope this book reinforces your memories of the exciting science and collegiality of the conference; for everyone else we hope the book encourages you to engage in nutrigenomic research and to attend the next ILSI conference on nutrigenomics.

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