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Foreword

BERNADETTE M. MARRIOTT

Dr. Bernadette Marriott was named first Director of the National Institutes of Health's Office of Dietary Supplements (http://dietary-supplements.info.nih.gov) in December 1995. She came to NIH from the Food and Nutrition Board, National Academy of Sciences, where she was Deputy Director. Currently she is the Vice Provost for Research and Graduate Studies, Dean of the Graduate School, and Professor of Biology, Northern Arizona University.

In the early 1980s, I had the good fortune to spend some concentrated time working in mineral research at the Vitamin and Mineral Laboratory, USDA Human Nutrition Research Center, Beltsville, Maryland. At that time, the focus was on defining status, characterizing deficiency states, investigating the impact of various dietary fibers on nutrient absorption, and studying nutrient–nutrient interactions. These topics are still key today but one new topic in nutrition has exploded onto the scientific scene that was not really part of general scientific discussions in Beltsville in 1980—antioxidants. To illustrate this point, 15 years later, in 1995, the newly Congressionally mandated Office of Dietary Supplements (ODS) at the National Institutes of Health (NIH) received more telephone calls in its first month of existence about the need for research dollars and information about the broad topic of antioxidants than any other.

In 15 short years, the newly emerging research area of antioxidants had taken the next step and become the hot science for the media. No matter how cautiously the results were interpreted by the scientist, in 1995 every study about antioxidants that dealt with a health outcome was grasped and headlined in the newsprint and fueled by the 5-second TV news health spot. The term antioxidant has been defined and redefined and explained again to the public with hundreds of cartoons in the last 4 years. Surveys indicate that the American public includes some type of antioxidant concept—however distorted—as part of their view of life span health. I would expect that most people in the United States today could more readily explain antioxidants than nutrients. In addition, their thirst for information on this topic continues and seems unending! For the public, antioxidants embody a solution to most health problems and to living a long life without looking old! Recent studies have shown that reactive oxygen and nitrogen species may serve intracellular messenger functions. Regulation of cellular signal transduction pathways by oxidation-reduction or redox dependent processes has gained remarkable attention. As a result, elucidation of the molecular bases of oxidant and antioxidant action is now under the spotlight.

What has all of this to do with the publication of a new, very targeted, scientific journal? The public interest in antioxidants serves to underscore the need for clear sources of high-quality scientific information. A problem for clinicians in trying to piece together the true science behind the media message is to find the antioxidant literature from where it is published in diverse international sources ranging

across molecular biology, immunology, chemistry, biochemistry, nutrition, and other biomedical journals. In particular, until now a clear source for reviewing the latest information on redox signaling and related underlying molecular mechanisms in antioxidant research was lacking. While scientists working in the field of antioxidant research are familiar with the best sources of papers in their immediate areas of research, there has been a need for a new journal that provides a discrete location for the state-of-the-art research that focuses solely on antioxidants with emphasis on signal transduction. With this first issue, *Antioxidants & Redox Signaling* provides for the scientist and clinician the latest research findings that underlie the mechanisms of the important health outcomes of public interest.

From another perspective, a goal in the ODS was to promote and provide support for scientific research related to dietary supplements. Part of this mandate included the development of a bibliographic database on dietary supplements. This database, the International Bibliographic Information on Dietary Supplements (IBIDS) was launched on January 6, 1999 and is freely accessible through the Internet. The difficulty the ODS faced in developing a database of scientific publication citations on dietary supplements was that the term "dietary supplements" typically is not included in the titles of the publications. Instead, a dietary supplement study is identified by the specific supplement ingredient under investigation. This made the development of a database difficult because important specific topics and or publications could be missed.

Searching for scientific papers on antioxidant research faces no such dilemma. Rather, one must instead carefully limit search strategies to identify the specific topics of interest. This new journal allows the scientist interested in specific aspects of antioxidant research to go to one sure source. As illustrated by the contents of this first issue, scientists will soon turn to *Antioxidants & Redox Signaling* as their first source of basic science information in this exciting field of research that is so important to understanding issues ranging from basic cell biology to life span health. Often scientists view a new journal with skepticism—*Antioxidants & Redox Signaling* is a new journal that instead fills a much-needed void. Welcome!

Address reprint requests to:
Bernadette M. Marriott, Ph.D.
Vice-Provost for Research and Graduate Studies
Northern Arizona University
P.O. Box 4087
Flagstaff, AZ 86001-4087
E-mail: bernadette.marriott@nau.edu