EDITORIAL

Welcome to *Nonlinearity in Biology, Toxicology and Medicine*

Edward J. Calabrese

Department of Environmental Health Sciences, N344 Morrill Science Center, University of Massachusetts, Amherst, MA 01003

This journal was created to provide a professional research focus to enhance understandings of dose-response relationships with particular, but not exclusive, focus on nonlinear dose-response relationships. Many journals, of course, deal with dose-response relationships both directly and indirectly within their aims and scopes. However, I believe that this new journal will be unique with its exclusive focus on understanding the nature of dose-response relationships, their mechanistic foundations, their common and unique features, and their broader biological and population-based interpretations. To date, dose-response relationships have been generally dealt with as concrete phenomena set within specific scientific disciplines. As valuable as this ongoing historical approach has been in discipline building, it has gradually contributed to a type of discipline-specific isolation and in some cases unique, and, indeed, confusing terminology. The net result is that over time there has developed less appreciation for cross-disciplinary efforts to account for dose-response relationships, and therefore less progress has occurred in this area. The new journal, *Nonlinearity in Biology, Toxicology and Medicine*, hopes to counter this trend by strongly encouraging researchers from all biologically oriented disciplines dealing with dose-response relationships to submit their dose-response manuscripts into a genuine interdisciplinary setting.

It is expected that this truly interdisciplinary approach to the exploration of the nature of the dose-response relationship will yield unique advances at a considerably faster rate than is currently the case. It is my belief that such research needs the intellectual firepower of a broad array of interacting scientific disciplines — and not confined as is currently the case to the discipline the researchers call their own — be it toxicology, pharmacology, epidemiology, biostatistics, radiation biology, or others. Consequently, a lively, interdisciplinary and uniquely insightful journal on the nature of the dose response is promised. I strongly encourage you to consider *Nonlinearity in Biology, Toxicology and Medicine* as a dynamic vehicle for publication of your manuscripts that will push back the boundaries of understanding the dose-response relationship.