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*Special Issue Reprint*

## Special Issue in Honor of Professor James D. McChesney on the Occasion of his 80th Birthday

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Plants have been the sources of important pharmaceuticals, flavoring agents, and agrochemicals. The antimalarial drugs artemisinin and quinine; the anticancer drugs taxol, etoposide, and vinca alkaloids; the sugar-free sweetening agents stevioside and rebaudiosides; and antifeedant azadiractin are good examples of important plant-based drugs, food additives, and agrochemicals currently on the market. Despite these and many other successes, there are significant challenges to discovering and developing commercially important natural products from plants, such as procuring plant materials in large quantities, separating active constituents from complex mixtures, and undesirable qualities, such as low solubility or poor chemical or metabolic stability of active constituents. Dr. James D. McChesney has contributed immensely to overcoming the inherent challenges associated with discovering and developing products modeled from plant-based natural product leads. His research on artemisinin, taxol, galanthamine, podophyllotoxin, and stevia sweet glycosides exemplifies the magnitude of these contributions. His extensive work on the structural modification of taxol led to the discovery and development of the anticancer agent TPI 287, a third-generation taxane analog that is currently undergoing clinical trials. He has had a long, distinguished teaching and research career, has authored more than 225 research publications, and holds more than 60 patents. He is a past president and Fellow of the American Society of Pharmacognosy and a Fellow of the AAAS. He has mentored many graduate students, post-docs, and junior faculty members who hold prominent positions in natural products research establishments worldwide. We



this SI Book Version to celebrate the eightieth birthday of Order Over Print. Proficient inventiveness in the field of natural product chemistry and pharmacology.

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