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# *Preface*

During the long career of William R. Dickinson (1931–2015), first at Stanford and then at the University of Arizona, he and his students and colleagues studied and wrote numerous scientific papers on sedimentary rocks and interpretations of basin genesis and tectonic setting (Spencer, 2016). His primary interest, and that of most of his students, was the Phanerozoic geologic evolution of southwestern North America. Following retirement in 1991, he began working with University of Arizona professor George Gehrels to identify sandstone provenance using detrital-zircon U-Pb geochronology. This led to determination that much of the Pennsylvanian to Jurassic sandstone of the Colorado Plateau was derived from the orogenic belt now associated with the Appalachian Mountains (Dickinson and Gehrels, 2003; see also Rahl et al., 2003).

Following this discovery and further detrital-zircon studies of Mesozoic strata on the Colorado Plateau, Dr. Dickinson began preparing this publication in order to identify key aspects of the sedimentary and tectonic history of Mesozoic strata of the Colorado Plateau and directly adjacent areas. He divided the strata into seven depositional systems (“deposystems”), but completed writing on only the lower five (Moenkopi, Chinle, Glen Canyon, San Rafael, Morrison). The two Cretaceous deposystems (Cedar Mountain–Burro Canyon, Mancos–Mesaverde), along with a concluding chapter, had not been written at the time of his death, although he had completed a chapter on the Pennsylvanian and Permian deposystems that underlie the Mesozoic strata. The manuscript that he left was so comprehensive in its treatment of upper Paleozoic strata and the lower five Mesozoic deposystems that it was submitted to the Geological Society of America for publication essentially without modification except for the addition of an Abstract and Conclusion prepared by me, and a modified title that better reflects actual content. Minor changes were also made following reviews by Judith Totman Parrish and Richard Schweickert.

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