

JAMES SPRINKLE – SHORT CURRICULUM VITA

1. Personal Data

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2. Education

Ph.D. Harvard University, January, 1971

M.A. Harvard University, June, 1966

B.S. Massachusetts Institute of Technology, June, 1965

3. Professional Experience

1986-present	First Mr. and Mrs. Charles E. Yager Professor, Department of Geological Sciences, University of Texas at Austin
1983-1986	Professor, Department of Geological Sciences, University of Texas at Austin
1977-1983	Associate Professor, Department of Geological Sciences, University of Texas, Austin
1971-1977	Assistant Professor, Department of Geological Sciences, University of Texas at Austin
1970-1971	NRC-USGS Postdoctoral Research Associate, U.S. Geological Survey, Denver, CO

4. Recent Honors, Awards, Fellowships

South-Central Federation of Mineralogical Societies Honorary Award, American Federation Scholarship Foundation, 2004-2006 (came with \$4,000 scholarships for 2 Geology graduate students)

Honorable mention for 1995 Best Paper Award in SEPM journal *Palaios*, 1996

Charles Schuchert Award of the Paleontological Society ("for excellence in paleontology by a person under 40 years of age"), 1982.

5. Recent Department, College, and Society Service

Faculty Evaluation Committee, Dept. of Geological Sciences, Univ. of Texas at Austin

Post-Tenure Evaluation Committee, Dept. of Geol. Sciences, Univ. of Texas at Austin

Jackson School member of Graduate Assembly, Univ. of Texas, Austin, 2006-present

Manuscript reviewer for paleontology journals + NSF Grant Proposals (EAR, DEB, INT)

Associate Editor, *Journal of Paleontology*, 2004-present

6. Teaching and Student Supervision

Each long semester, I teach a medium-to-large undergraduate course and one of four different graduate courses or seminars. GEO 404C, Plate Tectonics & Earth History, is a freshman-level 2nd geology course for Geology majors and nonmajors. I have taught this course (or its predecessor) 36 times since 1972. GEO 422K, Paleobiology, is a junior-level Substantial Writing Component course for our BS and BA Geology majors. I have taught this course every fall semester (37 times) since 1971.

GEO 389K, Paleontological Nomenclature and Techniques, has graduate student projects to prepare the different parts of a systematics paper for publication. GEO 383K, Paleoecology, GEO 391S, Current Topics in Paleobiology (Evolution), and GEO 391S, Current Topics in Paleobiology (Wierd Fossil Organisms), are graduate seminars that cover basic topics, current controversies, and recent discoveries in these subject areas. These 4 courses are offered on a rotating basis each semester.

Since 1971, I have supervised 7 MA Theses & 8 Ph.D. Dissertations, with 1 Ph.D. in progress.

7. Research Interests

I am an invertebrate paleontologist interested in Paleozoic marine communities and ecosystems and specializing in early (and now mostly extinct) echinoderms. In the past, I worked on late Paleozoic echinoderm communities in Montana, Oklahoma, and Texas. Since 1989, I have been working on Late Cambrian and Early Ordovician echinoderm communities from the Rocky Mountains plus Texas and Oklahoma. Most of this recent work has been done with colleagues Tom Guensburg (Rock Valley College, Rockford, IL), Forest Gahn (BYU Idaho), and former Ph.D. student Colin Sumrall (University of Tennessee), funded by two NSF grants. These time intervals overlap the critical transition between the Cambrian Evolutionary Fauna and the initial radiation of the Paleozoic Evolutionary Fauna, which then dominated marine ecosystems for the next 220 million years. However, before our work, they represented a major "gap" in the echinoderm fossil record, with very few echinoderms known from anywhere in the world. We were very successful collecting new echinoderms in the Early Ordovician on the first NSF grant (1989-1991), discovering several new faunas that are the largest ever found in North America.. We were somewhat less successful collecting echinoderms from the Late Cambrian on the second NSF grant (1993-1994), an interval where echinoderms were apparently much less common and harder to find in the field. The Late Cambrian project is now finished (8 papers published), but the Early Ordovician work (20 papers published, 1 paper in press, at least 10 more in preparation) has expanded so much that this project will take many more years to complete.

Among the most important echinoderms that we have found in our Early Ordovician field work in the Rockies are two new and extremely primitive crinoids that give us new information about the origin of this major echinoderm class. One crinoid, represented by a single specimen found near the base of the Ordovician in southern Idaho, is the earliest true crinoid ever collected (in review). The other crinoid, known from nine specimens from slightly higher in the Early Ordovician of western Utah, is the most morphologically primitive crinoid now known (Guensburg & Sprinkle, 2003).

8. Major Recent Grants

- 2006-2009 NSF Grant DBI-0646468 entitled "Conservation, Digitization, and Georeferencing of the Non-vertebrate Paleontology Type and Figured Collection of the Texas Natural Science Center at the University of Texas." National Science Foundation, Washington, DC, \$273,656. (Molineux/Sprinkle, co-PI's)
- 1996-1998 CRDF Grant RG1-242 entitled "Comparison of Early Ordovician Echinoderm Faunas on Separate Continents" from the Civilian Research and

- Defense Foundation, Arlington, VA, \$35,920 total (U.S. portion \$9,900) (Sprinkle/Rozhnov, co-PI's).
- 1993-1994 NSF Grant EAR-9304253 entitled "Search for Late Cambrian Echinoderms from the Rocky Mountains." National Science Foundation, Washington, D.C., \$39,553.
- 1989-1992 NSF Grant BSR-8906568 entitled "Early Ordovician Echinoderms from the Rocky Mountains." National Science Foundation, Washington, D.C., \$53,629.

9. Selected Major Publications (out of 149 total publications since 1965)

- Guensburg, T. E. & **Sprinkle, J.** 2007. Phylogenetic implications of the Protocrinoida: Blastozoans are not ancestral to crinoids. *Annales de Paléontologie*, 93(4): 277-290.
- Sprinkle, J.** & Collins, D. 2006. New eocrinoids from the Burgess Shale, southern British Columbia, Canada, and the Spence Shale, northern Utah, USA. *Canadian Journal of Earth Sciences*, 43(3):303-322.
- Schneider, C. L., **Sprinkle, J.**, & Ryder, D. 2005. Pennsylvanian (Late Carboniferous) echinoids from the Winchell Formation, north-central Texas, USA. *Journal of Paleontology*, 79(4):745-762.
- Sprinkle, J.** & Guensburg, T. E. 2004. Crinozoan, blastozoan, echinozoan, asterozoan, and homalozoan echinoderms, p. 266-280 (+ references). *In* Webby, B. D., Droser, M. L., Paris, F., & Percival, I. (eds.), *The Great Ordovician Biodiversification Event*. Columbia University Press, New York, 484 p.
- Guensburg, T. E. & **Sprinkle, J.** 2003. The oldest known crinoids (Early Ordovician, Utah) and a new crinoid plate homology system. *Bulletins of American Paleontology*, 364:1-43 (+ 9 Plates.).
- Guensburg, T. E. & **Sprinkle, J.** 2001. The earliest crinoids: New evidence for the origin of the dominant Paleozoic echinoderms. *Geology* 29(2):131-134.
- Awramik, S. M. & **Sprinkle, J.** 1999. Proterozoic stromatolites: the first marine evolutionary biota. *Historical Biology*, 13(4):241-253 (+ color figure).
- Sprinkle, J.** & Collins, D. 1998. Revision of *Echmatocrinus* from the Middle Cambrian Burgess Shale of British Columbia. *Lethaia*, 31(4):269-282.
- Sumrall, C. D., **Sprinkle, J.**, & Guensburg, T. E. 1997. Systematics and paleoecology of Late Cambrian echinoderms from the western United States. *Journal of Paleontology*, 71(6):1091-1109
- Sprinkle, J.** & Guensburg, T. E. 1995. Origin of echinoderms in the Paleozoic Evolutionary Fauna: the role of substrates. *Palaios*, 10(5):437-453.
- Guensburg, T. E. & **Sprinkle, J.** 1994. Revised phylogeny and functional interpretation of the Edrioasteroidea based on new taxa from the Early and Middle Ordovician of western Utah. *Fieldiana (Geology)*, New Series no. 29:1-43.
- Guensburg, T. E. & **Sprinkle, J.** 1992. Rise of echinoderms in the Paleozoic Evolutionary Fauna: significance of paleoenvironmental controls. *Geology*, 20(5):407-410 (+ cover photo).
- Sprinkle, J.** & Gutschick, R. C. 1990. Early Mississippian blastoids from western Montana. *Harvard University, Museum of Comparative Zoology Bulletin*, 152(3):89-166.

- Sprinkle, J.** & Kier, P. M. 1987. Phylum Echinodermata, p. 550-611. *In* Boardman, R. S., Cheetham, A. H., and Rowell, A. J. (eds.), *Fossil Invertebrates*. Blackwell Scientific Publications, Palo Alto, California, 713 p.
- Brett, C. E., Frest, T. J., **Sprinkle, J.**, and Clement, C. R. 1983. Coronoidea: a new class of blastozoan echinoderms based on taxonomic reevaluation of *Stephanocrinus*. *Journal of Paleontology*, 57(4):627-651.
- Sprinkle, J.** (ed.). 1982. Echinoderm Faunas from the Bromide Formation (Middle Ordovician) of Oklahoma. University of Kansas Paleontological Contributions, Monograph 1, 369 p. (plus author/co-author on 15 of 33 monograph chapters).
- Sprinkle, J.** and Bell, B. M. 1978. Paedomorphosis in edrioasteroid echinoderms. *Paleobiology*, 4(1):82-88.
- Katz, S. G. and **Sprinkle, J.** 1976. Fossilized eggs in a Pennsylvanian blastoid. *Science*, 192(4244):1137-1139.
- Sprinkle, J.** 1973. *Morphology and Evolution of Blastozoan Echinoderms*. Harvard University, Museum of Comparative Zoology Special Publication, 283 p.
- Robison, R. A. and **Sprinkle, J.** 1969. Ctenocystoidea: new class of primitive echinoderms. *Science*, 166(3912):1512-1514.