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Education:

1977 B.A. University of California, Riverside (Plant Science)
1987 M.S. University of California, Riverside (Soil Science)

Research and Professional Experience:

1977 - 1979 Staff Research Associate; U.C. Riverside
1979 - 1989 Staff Research Associate; U.C. Los Angeles
Research on: Radionuclide and transition metal uptake by plants; ecophysiology of desert vegetation.
1990 - 1991 Staff Research Associate; U.C. Berkeley
Research on: Ecophysiology of boreal, arctic, and grassland vegetation.
1991- Pres Laboratory Research Supervisor; U.C. Berkeley
Soil biophysical control of atmospherically reactive trace gases; soil microbial C and N dynamics; microbial ecology of biodegradation and stabilization of carbon in surface and subsurface soil.
2013 - Pres Affiliate; Lawrence Berkeley National Laboratory
Construction and deployment of atmospheric trace gas monitoring systems.

Synergistic Activities:

Developed Methods Workshop & Independent Project Course to train students in current soil analysis techniques
Designed and led construction of Environmental Plant Isotope Chamber facility at UC Berkeley

Recognition:

1987 Gamma Sigma Delta Honor Society membership awarded

Selected Publications:

Herman, D.J., P.D. Brooks, M. Ashraf, F. Azam, and R.L. Mulvaney. 1995. Evaluation of methods for nitrogen-15 analysis of inorganic nitrogen in soil extracts. II. Diffusion methods. *Communications in Soil Science and Plant Analysis*. 26(11&12):1675-1685.

Herman, D.J., M.K. Firestone, E. Nuccio, and A. Hodge. 2012. Interactions between an arbuscular mycorrhizal fungus and a soil microbial community mediating litter decomposition. *FEMS Microbiology Ecology* 80:236-247.

Herman, D.J., L.J. Halverson, and M.K. Firestone. 2003. Nitrogen dynamics in a Mediterranean annual grassland: effects of oak canopies and tree removal, climatic variables, and microbial populations. *Ecological Applications* 13(3):593-604.

Herman, D.J., K.K. Johnson, C.H. Jaeger, III, E. Schwartz, and M.K. Firestone. 2006. Root influence of nitrogen mineralization and nitrification in rhizosphere soil of slender wild oats. *Soil Science Society of America Journal*. 70:1504-1511.

Herman, D.J. and P.W. Rundel. 1989. Nitrogen isotope fractionation in burned and unburned chaparral soils. *Soil Science Society of America Journal* 53(4):1229-1236.