

CURRICULUM VITAE - LeRoy M. Dorman

BIRTH: October 15, 1938 **CITIZENSHIP:** U.S.A.

EDUCATION: B.S. 1960 Georgia Institute of Technology, Atlanta, Georgia
M.S. 1969 University of Wisconsin, Madison, Wisconsin
Ph.D. 1970 University of Wisconsin, Madison, Wisconsin

PROFESSIONAL EXPERIENCE: 2000 - 2002 Assistant Director, Geosciences Research Division, SIO
1996 - 1997 Chair, Faculty of SIO
1985 - 1987 Chair, Graduate Department, SIO
1983 - 1985 Chair, Geological Research Division
1982 - Present Professor of Geophysics, Scripps Institution of Oceanography (UCSD)
1978 - 1982 Associate Professor of Geophysics, Scripps Institution of Oceanography (UCSD)
1976 - 1978 Associate Research Geophysicist, Scripps Institution of Oceanography (UCSD)
1973 - 1976 Assistant Research Geophysicist, Scripps Institution of Oceanography (UCSD)
1971 - 1973 Research Geophysicist, Atl. Ocean. & Met. Labs, NOAA, Miami, Florida
1969 - 1971 Carnegie Fellow, Dept. of Terr. Mag., Carnegie Inst. of Washington, D.C.
1960 - 1963 Naval Officer, Last billet as Navigator on USS GEORGE CLYMER (APA-27)

PROFESSIONAL SOCIETIES: American Geophysical Union, Seismological Society of America
Acoustical Society of America, Society of Exploration Geophysicists

AWARDS & HONORS: Carnegie Fellow 1970, 1971
WHOI Visiting Scholar (Senior Studies) 1980
Antarctica Service Medal, awarded 2000 for service 1999-2000
National Defense Service Medal, awarded 2005 for service 1960-1963
Armed Forces Expeditionary Medal (with one bronze star) awarded 2005 for service 1962-1963

RESEARCH INTERESTS: Geophysics, especially seismology and gravity.
Seafloor instruments, especially ocean bottom seismometers.

GRADUATE STUDENTS J. A. Orcutt, J. Garmann, P. Spudich, R. Jacobson, K. Becker
A. W. Sauter, A. E. Schreiner, P. T. C. Hammer, S. Wiggins, N. M. Kanjorski

NON-SIO SCIENTISTS WITH RECENT COLLABORATION: T. Dixon, R. Stephen, A. Newman
P. Lundgren, M. Protti, S. Schwartz,

THESIS ADVISOR: R. P. Meyer, University of Wisconsin
POST-DOCTORAL ADVISOR: I. S. Sacks, Carnegie Institution of Washington

RECENT CRUISES: 1998 R/V R. G. SPROUL Rose Canyon Fault Experiment OBS recovery
1998 ARSV L. M. GOULD Tectonics of South Shetland Trench and Bransfield Strait
1999 RVIB N. B. PALMER Tectonics of South Shetland Trench and Bransfield Strait
1999 F/S SONNE Imaging the Seismogenic Zone with Geodesy and Seismology: Costa Rica
Ocean-Bottom Seismometer deployment off Osa Peninsula
1999 F/S SONNE Ocean-Bottom Seismometer recovery off Osa Peninsula and deployment off Nicoya
2000 R/V MELVILLE Ocean-Bottom Seismometer recovery off Nicoya Peninsula

**SELECTED
PAPERS:**

- Brown, K. M., Tryon, M., DeShon, H. R., Dorman, L. M., and Schwartz, S. Y., Transient Fluid Pulsing and Seismic Noise/Tremor Events in the Costa Rican Subduction Zone: Indications of Nearly Silent Slip?, *Earth. Planet. Sci. Lett.*, 2005. In Review.
- Sauter, Allan W. and Dorman, LeRoy M., A reusable implosive seismic source for midwater or seafloor use, *Geophysics*, 2005, in review.
- Norabuena, Edmundo, Dixon, T. H., Schwartz, S. Y., DeShon, H. R., Protti, M., Dorman, L. M., Flueh, E. R., Lundgren, P., Newman, A., Pollitz, F., and Sampson, D., Geodetic and Seismic Constraints on Some Seismogenic Zone Processes in Costa Rica, *J. Geophys. Res.*, 109, B11403, doi:10.1029/2003JB002931, 2004.
- DeShon, H. R., Schwartz, S. Y., Bilek, S., Dorman, L. M., Gonzalez, V., Protti, J. M., and Flueh, E., Seismogenic Zone Structure of the Southern Middle America Trench, Costa Rica, *J. Geophys. Res.*, 108(B10), 2491, doi:10.1029/2002JB002294, 2003.
- Robertson-Maurice, Stacey D., Wiens, Douglas A., Shore, Patrick J., Vera, Emilio, and Dorman, LeRoy M., Seismicity and Tectonics of the South Shetland Islands and Bransfield Strait from a Regional Broadband Seismograph Deployment, *J. Geophys. Res.*, 108, B10, ESE 4-1 to ESE 4-12, doi:10.1029/2003JB002416, 2003.
- Crawford, Wayne C., Hildebrand, J. A., Dorman, L. M., Wiens, D. A., and Webb, S. C., Tonga Ridge and Lau Basin crustal structure from seismic refraction data, *J. Geophys. Res.*, 108, B4, EPM 6-1 to EPM 6-17, doi:10.1029/2001JB001435, 2002.
- Newman, A. V., Schwartz, S. Y., Gonzales, V., DeShon, H. R., Protti, J. M., and Dorman, L., Along-Strike Variability in the Seismogenic Zone Below Nicoya Peninsula, Costa Rica, *Geoph. Res. Lett.*, 10.1029/2002GL015409, 2002.
- Dorman, LeRoy M. and Gehringer, Douglas D., Visualization of 3-dimensional Models in a Web Browser, *EOS, Transactions of the AGU*, 183, 199, 2002. http://www.agu.org/eos_elec/010258e.html.
- Pautet, L., Kuperman, W. A., and Dorman, L., Using refracted shear waves for velocity estimation, *Geophysical Prospecting*, 49, 281-286, EAEG, 2001.
- Tryon, Michael, Brown, Kevin, Dorman, LeRoy, and Sauter, Allan, A new benthic aqueous flux meter for very low to moderate discharge rates, *Deep Sea Research*, 49, 2121-2146, 2001.
- McGowan, John A., Cayan, Daniel R., and Dorman, LeRoy M., Climate-Ocean Variability and Ecosystem Response in the Northeast Pacific, *Science*, 281, 210-217, AAAS, Washington, 1998.
- Koper, Keith D., Wiens, Douglas A., Dorman, LeRoy M., Hildebrand, John A., and Webb, Spahr C., Modeling the Tonga Slab: Can Travel Time Data Resolve a Metastable Olivine Wedge?, *J. Geophys. Res.*, 103, B12, 30,079-30,100, 1998.
- Dorman, L. M., Book Review "The Sea Floor: An Introduction to Marine Geology", 3rd edition, by E. Seibold and W. H. Berger, *Pure Appl. Geophys.*, 152, 393-394, 1998.
- Zhao, Dapeng, Xu, Yingbiao, Wiens, Douglas A., Dorman, LeRoy M., Hildebrand, John, and Webb, Spahr, Depth extent of the Lau back-arc spreading center and its relationship to subduction processes, *Science*, 278, 254-257, 1997.