CURRICULUM VITAE

Name: DIEGO LIRMAN

EDUCATION

• Ph.D. Marine Biology. 1997. Rosenstiel School of Marine and Atmospheric Science, Miami.
Dissertation: Disturbance Ecology of the Branching Coral *Acropora palmata.*

• M.S. Marine Biology. 1992. California State University, Long Beach.
Thesis: Habitat segregation between adult and juvenile three-spot damselfish, *Stegastes planifrons,* in Roatan Island, Honduras.

• B.S. Biology. 1988. University of California, Los Angeles.

EMPLOYMENT

1997-Present Assistant Scientist, University of Miami
Duties: Simulation Modeling, GIS, Field Monitoring, Experimental Design

1993-1997 Research Assistant, University of Miami
Project: Seagrass Research, Microcosms and Mesocosms Design

SELECTED PUBLICATIONS

Fong, P. and D. Lirman. 1994. Damage and recovery of a coral reef after Hurricane Andrew. National Geographic Research and Exploration 10:246-248.

Fong, P., M. Jacobson, M. Mescher, D. Lirman, and M. Harwell. 1997. Investigating the management potential of a seagrass model through sensitivity and experiments. Ecological Applications 7:300-315.

Lirman, D. Reef fish communities associated with coral *Acropora palmata*: relationships to benthic attributes. 1999. Bulletin of Marine Science 65:235-252.

Maciá, S. and D. Lirman. 1999. Destruction of Florida Bay seagrasses by an grazing front of sea urchins. Bulletin of Marine Science 65:593-601.

Lirman, D. and P. Biber. 2000. Seasonal dynamics of algal communities of the Northern Florida Reef Tract. Botanica Marina 43:305-314

Lirman, D. 2001. Competition between macroalgae and corals: effects of herbivore exclusion and increased algal biomass on coral survivorship and growth. Coral Reefs 19:392-399.

Gentile, J.H., M. A. Harwell, W. Cropper, C. C. Harwell, D. DeAngelis, S. Davis, J. C. Ogden, D. Lirman. 2001. Ecological Conceptual Models: A Framework and Case Study on Ecosystem Management for South Florida Sustainability. Science of the Total Environment 274:231-253.

Lirman, D., P.W. Glynn, A.C. Baker, and G.E. Leyte Morales. 2001. Combined effects of three sequential storms on the Huatulco coral reef tract. Bulletin of Marine Science 69:267-278.

Cropper, W. P. Jr., D. Lirman, S. C. Tosini, D. DiResta, J. Luo, and J. Wang. 2001. Sponge population dynamics in Biscayne Bay, Florida. Estuarine Coastal and Shelf Science 53:13-23.

Irlandi, E , B. Orlando, S. Macia, P. Biber, T. Jones, L. Kaufman, D. Lirman, and E. Patterson. 2002. The influence of freshwater runoff on biomass, morphometrics, and production of *Thalassia testudinum*. Aquatic Botany 72:67-78.

Lirrman, D. and W.P. Cropper Jr. 2002. The influence of salinity on seagrass growth, survivorship, and distribution within Biscayne Bay, Florida: field, experimental, and modeling studies. Estuaries (In Press).

Lirman, D. 2002. A simulation model of the population dynamics of the branching coral *Acropora palmata*. Effects of storm intensity and frequency. Ecological Modelling (In Press).

Lirman, D., B. Orlando, S. Maciá, D. Manzello, L. Kaufman, P. Biber, and T. Jones. 2002. Coral communities of Biscayne Bay, Florida and adjacent offshore areas: Diversity, abundance, distribution, and environmental correlates. Aquatic Conservation (In Press).

Research Statement

My research emphasis is on the disturbance ecology of coastal ecosystems. Over the past 10 years, I have worked on diverse projects to: 1) evaluate the health of seagrasses, macroalgae, and coral reef communities, 2) estimate the impacts of multiple human and natural stressors on these susceptible natural resources, and 3) predict the potential impacts of future disturbances on these systems. My research has included a combination of extensive field monitoring, laboratory experiments, and simulation modelling framed within an ecological risk assessment protocol to document present-day condition of biological endpoints, susceptibility to stressors, and forecast future status based on simulated disturbance scenarios.

In the past 4 years, I have worked on interdisciplinary projects developed to understand the potential effects of changes in hydrology, water quality, and exploitation levels on benthic communities of Biscayne Bay and the Florida Keys National Marine Sanctuary. In these projects I documented the impacts of hurricanes, eutrophication, sedimentation, biological competition, salinity changes, boating activities, and oil pollution on corals, segrasses, sponges, and macroalgae.

I am fluent in Spanish and Italian and have research experience throughout the Caribbean and Central American region. I am familiar with Macintosh, PC, and Unix platforms and have worked with several statistical and GIS software.