

# *WaterSCAPES* Seminar Announcement

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*RIVER NETWORKS AS ECOLOGICAL CORRIDORS: A  
COMPLEX SYSTEM PERSPECTIVE FOR INTEGRATING  
HYDROLOGIC, GEOMORPHOLOGIC AND ECOLOGIC  
DYNAMICS*

Tuesday March 3 @ 5 PM

Room EC-3665

Address: 10555 W. Flagler Street, Miami FL 33174

## **ABSTRACT**

Given the commonalities among various dendritic structures and despite the variety and complexity of the ecosystems involved, an integrated line of research is presented linking a wide range of related topics, including biodiversity of freshwater fish in river networks and vegetation along riparian systems, how river networks affected historic spreading of human populations, and how they influence the spreading of water-borne disease. A general theory emerges on the effects of dendritic geometries on the ecological processes and dynamics operating in river basins that will establish a new significant scientific branch. Insights provided by such theory will lend themselves to issues of great practical importance such as integration of riparian systems into large-scale resource management, spatial strategies to minimize loss of freshwater biodiversity, and effective prevention campaigns against water-borne diseases.

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