## iFAST: The International Forum on Advanced Environmental Sciences and Technology

A series of distinguished seminars by eminent scientists

8 a.m. CDT; 9 a.m. EDT; 1 p.m. GMT; 9 p.m. Beijing Wednesday, April 14, 2021



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https://biology.ufl.edu/people/faculty/#L

After attending Arizona State University for two years, Leibold received his undergraduate and master's degrees at the University of Arizona where he worked with James H Brown. He obtained his PhD with Earl Werner and Don Hall at the Kellogg Biological Station at Michigan State University. Afterwards, he did post-docs at Duke University with Henry H. Wilbur and at MSU with Alan Tessier before moving to the University of Chicago. While there, he progressed from Assistant Professor to Associate Professor and served as Chair of the Committee on Evolutionary Biology before moving to the University of Texas in 2003. He recently moved to the University of Florida where his research focuses on the interfaces of experimental, theoretical and correlational methods in community and ecosystems ecology, especially focused on freshwater lakes and pond ecosystems. "It's been an incredible privilege to have been able to work with the mentors, colleagues and students I have met in ecology and to have been able to participate in the excitement and discovery in my field".

## Rethinking metacommunity ecology - linking pattern and process, is it possible?

Local communities are complex and dynamic systems of interacting species affected by interacting dynamics involving environmental, spatial and stochastic dynamics at multiple scales. Not surprisingly this can be confusing and difficult to study. Experimental approaches over the last 40 years have provided a much more solid basis for understanding these dynamics than was previously available but it isn't clear if or how they help us resolve the links between pattern and process in natural settings where spatial, temporal and dynamical context are not controlled and where communities vary in their degree of open-ness to multi-scale effects. Emerging developments in theoretical and statistical modeling of community assembly that incorporates the insights from this history of experimental ecology suggests we may have more success than we might have ever thought possible. Here I will review some of the ways of solidifying links between process and pattern and ask how well they seem to be able to do so, what challenges appear to be the most critical to future progress and suggest some tentative ways that these might be addressed.









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Organizing Committee Chair: Jizhong Zhou (University of Oklahoma, USA; <a href="https://www.ou.edu/ieg">https://www.ou.edu/ieg</a>)
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