



**The Living World**

Sponsored by the Ecology &  
Evolution Dept @ SBU

**"Behavior is a Motor &  
a Brake for Evolution."**



One of the most striking patterns of evolution is its uneven tempo across the tree of life. Whereas some traits and lineages diversify rapidly, others appear to remain inert over millions of years. But, why is this so? Dr. Muñoz explores this question.

**Dr. Martha Muñoz**

**DARWIN DAY**



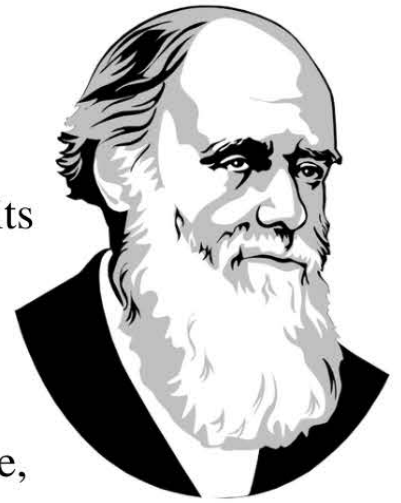
**CELEBRATION**



Friday, February 10th @7:30 pm

Earth & Space Sciences Building, Rm 001

**Abstract:** One of the most striking patterns of evolution is its uneven tempo across the tree of life. Whereas some traits and lineages diversify rapidly, others appear to remain inert over millions of years. But, why is this so?



What allows some features to achieve evolutionary overdrive, whereas others appear to straddle evolution's slow lane? I explore this question by focusing on one of evolution's key architects: behavior. I illustrate how organisms are not the passive targets of selection; rather, through behavior, they can be the agents of selection. Using Caribbean Anolis lizards as a model system, I reveal the signatures of behavior at both micro- and macroevolutionary scales, and illustrate the constraints on this phenomenon. Behavior can slow or hasten evolution and, on occasion, it does both simultaneously.

**Bio:** Martha Muñoz is an Assistant Professor in the Department of Ecology & Evolutionary Biology at Yale University and an Assistant Curator in the Yale Peabody Museum. She earned her PhD in 2014 from Harvard University and her undergraduate degree in 2007 from Boston University. Prior to joining the faculty at Yale, she was an Assistant Professor at Virginia Tech, and did postdoctoral research fellowships at Duke University and at the Australian National University. She is an evolutionary biologist, and her research focuses on uncovering the mechanisms that guide the rate at which evolution unfolds. Her research centers on reptiles, amphibians, and fishes, and she primarily works in the Caribbean.