

The evolutionary energetics of childhood development and health

Abstract:

Despite decades of targeted policy and intervention, childhood growth faltering remains a key global health issue affecting hundreds of millions of individuals. At the same time, worldwide prevalence of childhood overweight and obesity has risen from only 4% in 1975 to over 20% today. In this talk, I describe how an evolutionary energetics framework can provide insight into these crises. I draw on my lab's published and ongoing research in Ecuador, Papua New Guinea, Chile, the U.S., and elsewhere. This work combines field and laboratory approaches to define the evolved pathways of energy (i.e., calorie) acquisition/use that drive variation in human development, metabolism, and health. Findings challenge long-held assumptions in public health and nutrition, providing novel perspectives for addressing childhood malnutrition in the U.S. and beyond.