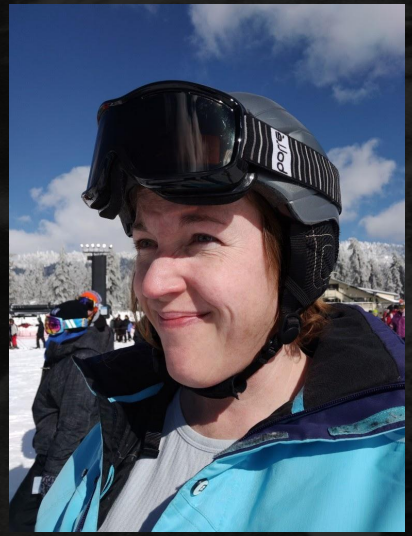
BALL STATE UNIVERSITY

The Mathematical Laws of Morphology and Biomechanics

PURDUE FORT WAYNE

Tuesday 30th November 2021 2pm EST

Virtual Presentation: https://purdue.webex.com/meet/aselvite



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When the product is not the sum of its parts: missing links in locomotor biology

In a perfectly engineered system, we can calculate the output with data from individual mechanisms contributing to the whole. In comparative locomotor biology we often work from the top--whole organism and tissue behavior--down to the mechanisms responsible for the observed behavior. In biological systems there are rarely perfectly explained phenomena, and in several instances these gaps in our understanding are substantial. Here I present some case studies of performance not well predicted by individual mechanisms, and how these represent some of the most interesting challenges in biomechanics today.

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