

CNASC Seminar

Speaker

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**Tuesday, April 16, 2019
1pm, HH-3017**

Formulation of a population model with physiological structure

Abstract:

I use dynamic energy budget (DEB) theory to build a physiologically structured population model (PSPM) that explicitly includes energy acquisition and allocation at different stages of an organisms' life cycle. PSPMs provide a link between individual-level processes and population dynamics. PSPMs are formulated using functions that represent the life history of the individuals as demographic rates relative to their environment. The demographic rates in the DEB-PSPM offer a mechanistic representation based on metabolic aspects of the organisms.