1125-92-237 **Robert Stephen Cantrell*** (rsc@math.miami.edu), Department of Mathematics, The University of Miami, Coral Gables, FL 33124, and **King-Yeung Lam**, **Xinru Cao** and **Tian Xiang**. *Fitness based prey dispersal and prey persistence in intraguild predation systems.*

We establish prey persistence in intraguild predation systems in bounded habitats under mild conditions when the prey disperses using its fitness as a surrogate for the balance between resource acquisition and predator avoidance. The model is realized as a quasilinear parabolic system where the dimension of the underlying spatial habitat is arbitrary. (Received August 16, 2016)