Biology Seminar



12:30 - 1:30 pm Friday, February 7, 2020 WSC 240



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Behavioral strategies and neural adaptations driving visually guided predation in aerial insects

For aerial predatory insects, detecting a fast and small moving target and catching it mid-air is crucial for survival. Such ability is shared with other species, think for example, an outfielder intercepting the ball during a baseball game. Thus, target detection and interception is a task solved by brains of very different complexity. How do miniature insects achieve the necessary sensory performance? Do they all share the same flight strategy and underlying neural algorithm, or have individual species found solutions tailored to their eye size, ecosystem type and phylogeny? In this talk I will present work from my laboratory aimed at answering such questions; we are studying the behavior, sensory performance, eye morphology and neural code of premotor neurons in aerial insect predators.



Three of the visually guided aerial species that the Bellido group currently investigate in the FlySy Lab: A dragonfly, a robber fly and a killer fly (photo credit Sam Fabian)

