Salamanders of the Family Salamandridae are ecologically diverse, feeding across aquatic and terrestrial environments, and employ different behaviors depending on the environment. When feeding on land, tongue projection is most often used, but in water, salamanders commonly rely on suction feeding to capture prey. My work explores the morphological and kinematic differences that occur across salamandrid feeding. In this seminar I will focus on investigating functional trade-offs that may occur during different feeding behaviors using traditional morphological techniques, as well as high-speed videography and digital particle image velocimetry (DPIV). Further studying these systems improves our understanding of how feeding patterns evolved within the Family Salamandridae, as well as provide insight to how integrated systems meet the challenges of transitioning between different environments and functional demands.