WIPER is a novel wireless animal-borne anti-poaching device that provides an immediate alert with a GPS location to authorities once a shot is detected near the protected animals. WIPER is based on a low-power acoustic shot detector integrated into existing GPS tracking collars currently being used to study a wide variety of animals. As opposed to muzzle blast-based detectors, WIPER detects the ballistic shockwave generated by the bullet that cannot be muffled by suppressors commonly used by poachers. This talk will present the unique challenges of this domain and the proposed solutions to them. The project is sponsored by the Vodafone Americas Foundation and Vanderbilt University.