Protecting our hearing, one fish at a time: hair cell death and protection in a zebrafish model system

Monday, February 9, 2015
4pm
Frances Searle Building
Room 3-417
Evanston Campus

Toxic insults such as aminoglycoside antibiotics, some chemotherapy agents, and noise, can kill hair cells in the inner ear, resulting in hearing loss. Since we can't regenerate our hair cells, it is imperative that we develop protective drugs that prevent hair cell death. The Coffin Lab uses the lateral line of larval zebrafish as a model system to study the cellular mechanisms of hair cell death and to identify novel protective compounds. Our recent work also examines occult ototoxins; commonly-used compounds that may damage hair cells. Dr. Coffin's talk will focus on two basic questions: what compounds damage hair cells, and how do we prevent that damage and preserve hearing?