Amy Williams
Roche/ARCS Foundation Scholar – Portland Chapter

Recipient Institution: Oregon Health & Science University, School of Medicine
Department: Behavioral Neuroscience
Degree Pursuing: PhD
Adviser: Matt Lattal, Behavioral Neuroscience

Research Focus: Amy explores maladaptive learning that underlies disorders such as post-traumatic stress disorder and addiction. Specifically, she is working on an improved mouse model of PTSD. Most labs utilize a paradigm of classical conditioning that does not capture the human experience of PTSD that has more than one form, such that a PTSD patient can be exposed to a trauma once (shooting victims) or multiple times (combat veterans). Thus, she is studying how multiple exposures to feared stimuli differ from a singular exposure and what neural correlates are involved. She also plans to study how alcohol use during intervening exposures to trauma alters the effects of the second exposure.

Publications/Presentations/Symposiums:
- Ary AW, Lominac KD, Wroten MG, Williams AR, Campbell RR, Ben-Shahar O, von Jonquieres G, Klugmann M, Szumlinski KK. Imbalances in prefrontal cortex CC-Homer1 versus CC-Homer2 expression promote cocaine preference. JNeurosci 2013; doi: 10.1523/JNEUROSCI.1727-12.2013.
- Wroten MG, Williams AR, Szumlinski KK (June, 2012). A history of binge alcohol drinking augments Homer2 expression, as well as PI3K and ERK signaling, within the BNST. Poster presented at: Research Society on Alcoholism, San Francisco, CA.
- Williams AR, Lattal KM (March 2014). HDAC3-Inhibition Enhancement of Fear Extinction. Poster presented at: OHSU's Research Week, Portland, OR.

Grants, Fellowships and Scholarships:
- Roche/ARCS Foundation Scholar Award Program in the Life Sciences 2014
- DiaMonD-UREKA Scholar Exchange Program, UCSB and DCU, 2011

Undergraduate Education: University of California, Santa Barbara, BS biopsychology with highest honors