

# CATHERINE DAVIS

## *Curriculum Vitae*

Psychopharmacology Laboratory  
Department of Psychology  
American University  
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### Education:

<i>Institution</i>	<i>Degree</i>	<i>Date</i>	<i>Field</i>
American University Washington, DC	Ph.D. Candidate, 3 <sup>rd</sup> Year	8/04-Present	Behavior, Cognition, & Neuroscience
American University Washington, DC	M.A.	8/06	Behavior, Cognition & Neuroscience
Washington & Jefferson College, Washington, PA	B.A.	8/00-5/04	Psychology: Neuroscience Concentration

### Honors:

Member of Phi Sigma (National Honor Society in Biology)  
Member of Psi Chi (National Honor Society in Psychology)  
Alumni Prize for Original Research in the Life Sciences 2004 (Washington & Jefferson)  
Psychology Scholar Book Award 2004 (Washington & Jefferson)

### Relevant Work and Academic Experiences:

#### *American University*

Psychopharmacology Laboratory, Department of Psychology  
Ph.D. program in Behavioral Neuroscience, August 30, 2004-Present  
Advisor: Dr. Anthony L. Riley

#### Histological Techniques

Academic year 2004-2005 to present, ongoing

Duties include setting up histological assays within the lab, familiar with drug administration, animal perfusion, brain collection, brain slicing (microtome and cryostat), use of brain atlas, fixation and labeling techniques, light and fluorescence microscopy, and digital image capture and processing of image using computer software; currently compiling a manual for the lab concerning all the above mentioned techniques

Adjunct Faculty, Drugs & Behavior  
Fall Semester 2007

Guest Lecturer, Introduction to Psychology

Topic: Memory and Learning

Discussed chapter during lecture, constructed outline for students to follow during class, wrote short answer and essay questions for test

Teaching Assistant, Statistics for the Behavioral Sciences

Spring semester, academic year 2004-2005

Duties included correcting tests, tutoring students outside of class on homework and general questions, holding office hours, and lecturing frequently when regular professor was out of town

Teaching Assistant, Behavior Principals

Fall semester, academic year 2004-2005

Duties included correcting exams, quizzes and book reports, tutoring students outside of class, proctoring exams, and holding office hours

*Washington and Jefferson College*

Howard Hughes Medical Institute (HHMI)-sponsored Intersession Internship

University of Pittsburgh Center for Neuroscience, January 2004

Advisor: Dr. J. Patrick Card & Dr. Alice G. Lee

Neuroscience Independent Student Research Project

Washington & Jefferson College August 2003-May 2004

Advisor: Dr. Lynn Wilson

Howard Hughes Medical Institute (HHMI)-sponsored Summer Research Internship

Washington & Jefferson College, June-August 2003

Advisor: Dr. Candy DeBerry

Washington & Jefferson, Department of Psychology

Laboratory Teaching Assistant, 2003-2004 academic year

Duties included assisting students with laboratory experiments and equipment clean-up; tutoring and helping students with laboratory-related coursework, including lab reports, data collection

Washington & Jefferson, Department of Biology

Laboratory Teaching Assistant, Fall 2002 & Spring 2003-2004

Animal Physiology and Experimental Neuroscience classes

Duties included assisting students with laboratory protocols, experiments, and proper lab clean-up; tutoring students and helping with coursework; testing new experiments and co-writing the laboratory manual for the Experimental Neuroscience class

Service:

Reviewer, Life Sciences 2007

Faculty Search Committee, Graduate Student Member, 2005-2006 academic year

American University

Phi Sigma Student Liason, 2003-2004 academic year  
Washington & Jefferson College

### Publications:

Roma PG, Davis CM, Riley AL. Effects of cross-fostering on cocaine-induced taste aversions in Fischer and Lewis rats. *Dev Psychobiol* 2007;49(2):172-9.

Davis CM, Riley AL. The effects of cocaine preexposure on cocaine-induced conditioned taste aversion learning in Fischer and Lewis rat strains. *Pharmacol Biochem Behav* 2007;87(1):198-200.

Davis CM, Roma PG, Dominguez JM, Riley AL. Morphine-induced place conditioning in Fischer and Lewis rats: acquisition and dose-response in a fully biased procedure. *Pharmacol Biochem Behav* 2007;86(3):516-23.

Riley AL, Davis CM, Roma PG. (in press) Strain differences in taste aversion learning: Implications for animal models of drug abuse. In: Reilly, S. & Schachtman, T.D., editors. *Conditioned taste aversion: Behavioral and neural processes*. New York: Academic Press.

Roma PG, Davis CM, Huntsberry ME, Kohut SJ, Riley AL. (submitted) Early maternal separation and sex differences in the aversive and motor-stimulating effects of amphetamine in adult rats.

Fox MA, Davis CM, Lipizzi EL, Monks CA, Riley AL. (submitted) The effects of mu, delta and kappa opioid receptor antagonists on the acquisition of morphine-induced taste aversions.

### Conference Presentations:

Davis, C.M. & Sawchuk, A. (2004, March) *Biochemical and immunofluorescence evidence of NMDA receptor subunits in Ambystoma tigrinum retina*. Poster presented at the Annual Western Pennsylvania Undergraduate Biology Symposium, Pittsburgh, PA

Davis, C.M., Roma, P.G., Keeler, M.A. & Riley, A.L. (2005, June) *Genetic strain, maternal environment, and biological sex interact to affect cocaine-induced taste aversions in the Fischer and Lewis rats*. Poster presented at the annual meeting of the College on Problems of Drug Dependence, Orlando, FL.

Davis, C.M., Roma, P.G. & Riley, A.L. (2005, August) *Cross-fostering effects on the extinction of cocaine-induced taste aversions in the Fischer and Lewis rat strains*. Poster presented at the annual meeting of the American Psychological Association, Washington, DC.

Davis, C.M., Valderama, J. & Riley, A.L. (2005, November) *Effects of morphine preexposure on morphine-induced taste aversions and place preferences in the Fischer (F344) and Lewis (LEW) inbred rat strains*. Poster presented at the annual meeting of the Society for Neuroscience, Washington, DC.

Davis, C.M. & Riley, A.L. (2006, June) *Effects of drug preexposure on place preferences and taste aversions in Fischer (F344) and Lewis (LEW) rats*. Poster presented at the annual meeting of the College on Problems of Drug Dependence, Scottsdale, AZ.

Roma, P.G., Davis, C.M. & Riley, A.L. (2006, June) *Acquisition of drug-induced conditioned place preferences in Fischer and Lewis rats*. Poster presented at the annual meeting of the College on Problems of Drug Dependence, Scottsdale, AZ.

Davis CM, Rice KC, Riley AL. (2007, June) *Strain differences in (-)-U50,488H-induced conditioned taste aversions*. Poster presented at the annual meeting of the College on Problems of Drug Dependence, Quebec City, Quebec, Canada.

### Invited Talks:

Riley A, Davis C, Roma P. Epigenetic factors in drug use and abuse. Invited presentation at University of Granada (Granada, Spain), 2007.

Riley A, Davis C, Roma P. Epigenetic factors in drug use and abuse. Invited presentation at Universitat Rovira I Virgili (Reus, Spain), 2007.

Riley A, Davis C, Roma P. Epigenetic factors in drug use and abuse. Invited presentation at University of Guelph (Guelph, Ontario, Canada), 2007.