Dr. Jennifer Trevitt

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Education

University of Connecticut

Storrs, CT Department of Psychology

Ph.D. in Psychology, discipline: Neuroscience, February, 2000

<u>Title</u>: The effect of D1 receptor modulation on GABA release in the substantia nigra pars reticulata.

Master of Arts in Behavioral Neuroscience, October 1997

<u>Title</u>: The effects of acute and repeated administration of typical and atypical antipsychotics on operant behavior and tremulous jaw movements in rats: Possible relevance to Parkinson's disease.

California State University, Fullerton

Fullerton, CA Department of Psychology

Bachelor of Arts in Psychology, June 1992

Professional experience California State University, Fullerton

Fullerton, CA

09/09 - present

Title: Associate Professor

09/03 - 08/09

Title: Assistant Professor

- Primary teaching responsibilities include: physiological psychology (Psych 306), physiological psychology laboratory (Psych 306L), computer applications in psychology (Psych 300), psychopharmacology (Psych 475)
- Director of personal laboratory; focus of research is the anatomy and functional connectivity of the basal ganglia as it relates to movement disorders, decision making, and nutritional psychology.
- Supervise the thesis work of graduate students and honors projects of undergraduate students.

University of California, Irvine

Irvine, CA

03/00 - 09/03

Title: Postgraduate Researcher, Step II

- Investigated the effect of dopamine on cortically-driven striatal immediate-early gene induction in chemically defined subpopulations of neurons.

- Proficient at immunohistochemistry, in situ hybridization techniques, visualization and quantification of neuronal markers using computer-assisted image analysis.

Title: Lecturer, Biology 113L, Spring Quarter, 2002

- Instructed 24 undergraduate students in a neuroscience laboratory class
- Conducted experiments designed to give students "hands-on" research experience and explore areas of research including anatomy, neurophysiology, pharmacology, behavioral testing, and sleep.

University of Connecticut

Storrs, CT

09/95 - 02/00

Title: Graduate Research and Teaching Assistant

- Instructor, physiological psychology (Psych. 257W) fall semester, 1998
- Organized and conducted computerized behavioral pharmacology experiments
- Organized and conducted behavioral observation experiments
- Accomplished at stereotaxic surgery including drug and microdialysis cannulations
- Proficient at trans-cardial perfusions and histological analysis of microdialysis probe and drug cannulae placements
- Constructed microdialysis probes for intracranial implantation
- Analyzed neurochemical catecholamine, acetylcholine and amino acid tissue and dialysate samples utilizing high performance liquid chromatography (HPLC)
- Performed decapitations and prepared tissue assays for HPLC analysis
- Supervised and trained graduate and undergraduate research assistants
- Assisted in teaching graduate-level statistics classes

California State University, Fullerton

Fullerton, CA

09/92 - 06/95

Title: Graduate Research and Teaching Assistant

- Assisted in teaching physiological psychology laboratory classes
- Assisted in teaching classes addressing research methods in psychology
- Conducted laboratory portions of classes addressing proper research design
- Designed, implemented, and analyzed a human-subjects research project
- Provided statistical and computer support to students
- Proficient at using various computer software packages including Word Perfect, Microsoft Word, Statistical Package for Social Sciences (SPSS), SAS, Systat, and Sigma Plot

Teaching Experience

Courses Taught at CSUF:

- Introduction to Psychology (PSYC101)
- Computer Applications in Psychology (PSYC300)
- Physiological Psychology (PSYC306)

- Physiological Psychology Laboratory (PSYC306L)
- Pyschopharmacology (PSYC475)
- Graduate seminar Hormones and Behavior (PSYC520T)

Lecturer, Biology 113L, University of California, Irvine, Spring Quarter, 2002

- Instructed 24 undergraduate students in a neuroscience laboratory class and conducted experiments designed to give students "hands-on" research experience and explore areas of neurobiology including anatomy, neurophysiology, pharmacology, behavioral testing, and sleep.

Instructor, Physiological Psychology (Psych 257W), University of Connecticut, Fall Semester, 1998

- Instructed 20 undergraduate students in the principles of physiological psychology. The class was designated "W" as it fulfilled a writing requirement. The students were obliged to write several papers of increasing complexity over the course of the semester.

Teaching Assistant, Statistics 379 and 465, University of Connecticut, 1996-1998

- TA for the graduate level statistics classes for two years.

Teaching Assistant, Psychology 110 Lab, University of Connecticut, Fall Semester 1995

- TA for two sections of the required undergraduate introductory psychology lab. Instructed students in basic experimental concepts, as well as the fundamentals of scientific writing.

Teaching Assistant, Physiological Psychology, California State University, Fullerton, 1992 - 1995

- TA and occasional lecturer for upper-division undergraduate physiological psychology class. Taught the laboratory portion of the class as well as running review sessions before all major exams.

Teaching Assistant, Research Methods, California State University, Fullerton, 1992

- TA for the lab portion of the undergraduate research methodology class. Assisted students in designing, implementing, analyzing and reporting a human-subjects research project.

Presentations and Educational Activities

- Invited guest speaker, "Managing Stress", Fibromyalgia and Chronic Pain Conference, March, 2013
- Invited guest speaker, "Broken Brains: The Effects of Age, Disease and the Environment", Graduate Women in Science Annual Conference, October 2010
- Keynote Speaker, "Parkinsons' Disease: Is Coffee the New Cure?", Southern California Psychology Conference for Community Colleges, Mt. San Antonio College, April 2006
- Invited guest speaker, "Brain Talk; How Neurons Communicate", OASIS Foundation, Garden Grove Medical Center, May 2006
- Invited guest speaker, "Balancing Family and Career", University of California, Irvine, May 2005
- Participated in the NSF Regional Grants Conference hosted by MESA, April, 2005

- Invited guest lecturer, The California State Summer School for Math and Science (C.O.S.M.O.S.), a month-long residential program for gifted high school students, 2002
- Participated in the University of California, Irvine "Ask A Scientist" program, 2001, 2002
- Invited presentation, "Interactions Between Dopamine and GABA in the SNr: A Neurochemical Study Utilizing Amino-Acid Microdialysis", Pfizer, June 2000.
- University of Connecticut Neuroscience Fellows Colloqium, "The Effects of SCH23390 in the Substantia Nigra pars compacta", May 2000
- University of Connecticut Neuroscience Fellows Colloqium, "Olanzapine: The new atypical antipsychotic?", May 1999

Honors and Awards

Faculty Development Center Undergraduate Support Initiative Research Award (undergraduate student Arlene Martinez), Fall 2014

Faculty Development Center Undergraduate Support Initiative Research Award (undergraduate student Sean Page), Fall 2014

Faculty Development Center Undergraduate Support Initiative Research Award (undergraduate student Azaadeh Goharzad), Fall 2013

Faculty Development Center Faculty Enhancement and Instructional Development grant, Spring 2009

Faculty Development Center Undergraduate Support Initiative Research Award (undergraduate student Deanna Tamiazzo), Fall 2008

ASC Junior Faculty Research Award #03412 (\$49750.00), Spring 2008

Faculty Development Center Undergraduate Support Initiative Research Award (undergraduate student Lilia Roderiguez), Fall 2007

Faculty Development Center Undergraduate Support Initiative Research Award (undergraduate student Chaz Larsen), Fall 2007

ASC Junior Faculty Research Award #03459 (\$4900.00), Spring 2006

Faculty Development Center Undergraduate Support Initiative Research Award (undergraduate student Azadeh Jalali), Fall 2005

Faculty Development Center Undergraduate Support Initiative Research Award (undergraduate student Fred Florian), Fall 2005

Faculty Development Center Untenured Faculty Development Award, California State University, Fullerton, 2003

Outstanding Alumnus, California State University, Fullerton, 2002

Two-year Post-Doctoral Fellowship, 1 F32NS41717-01, NRSA, 2001

Doctoral Dissertation Fellowship, University of Connecticut, 1999

Neuroscience Fellow, University of Connecticut, 1996-1998

Professional memberships

Society for Neuroscience

Women in Neuroscience

Faculty for Undergraduate Neuroscience

American Psychological Association

Western Psychological Association

Publications (in preparation)

Johnson, J.* and Trevitt, J. Dose dependent effects of adenosine antagonists on tacrine-induced tremulous jaw movements.

Sidhu, N.* and Trevitt, J. Effect of a high-fat diet on anxiety-like behaviors in adult rats.

Publications (in press)

Trevitt J., Kawa K.*, Jalali A.*, Larsen C.* (2009) Differential effects of adenosine antagonists in two models of Parkinsonian tremor. *Pharmacology, Biochemistry and Behavior*, 94(1):24-9. doi:10.1016/j.pbb.2009.07.001

Trevitt J., Vallance C.*, Harris A.*, Goode T.* (2009) Adenosine antagonists reverse the cataleptic effects of haloperidol: Implications for the treatment of Parkinson's disease. *Pharmacology, Biochemistry and Behavior*, 92, 521-527. DOI information: 10.1016/j.pbb.2009.02.001

Trevitt J.T., Morrow J.M.* and Marshall, J.F. (2005) Dopamine manipulation alters immediate early gene response of striatal parvalbumin interneurons to cortical stimulation. *Brain Research*, 1035(1): 41-50

Ishiwari K., Mingote S., Correa M., Trevitt J., Carlson B., Salamone J.D. (2004) The GABA uptake inhibitor beta-alanine reduces pilocarpine-induced tremor and increases extracellular GABA in substantia nigra pars reticulata as measured by microdialysis. *Journal of Neuroscience Methods*, 140(1-2):39-46.

Trevitt J.T., Carlson B.B., Correa M., Keene, A., Morales M. and Salamone J.D. (2002) Interactions between dopamine D1 receptors and gamma-aminobutyric acid mechanisms in substantia nigra pars reticulata of the rat: Neurochemical and behavioral studies. *Psychopharmacology*, 159(3): 229-237

Trevitt J.T., Carlson B.B., Nowend K.L. and Salamone J.D. (2001) Substantia nigra pars reticulata is a very potent site of action for the behavioral effects of the D1 antagonist SCH 23390. *Psychopharmacology*, 156: 32-41

Carlson B.B., Trevitt J.T. and Salamone J.D. (2000) Effects of H1 antagonists on cholinomimetic-induced tremulous jaw movements: Studies of diphenhydramine, doxepine and mepyramine. *Pharmacology, Biochemistry and Behavior*, 65(4): 683-689

Trevitt J., Carlson B., and Salamone J.D. (1999) Behavioral assessment of atypical antipsychotics in rats: Studies of the effects of olanzapine (Zyprexa). *Psychopharmacology*, 145: 309-316

Mayorga A.J., Trevitt J., Conlan A., Gianutsos G., and Salamone J.D. (1999) Striatal and nigral mechanisms involved in the antiparkinsonian effects of SKF 82958 (APB): Studies in a rodent model of tremor. *Behavioral Neuroscience*, 143: 72-81

Mayorga A.J., Cousins M.S., Trevitt J.T., Conlan A., Gianutsos G. and Salamone J.D. (1999) Characterization of the muscarinic receptor subtype mediating pilocarpine-induced tremulous jaw movements in rats. *European Journal of Pharmacology*, 364: 7-11

Hamill S., Trevitt J.T., Nowend K.L., Carlson B.B., and Salamone J.D. (1999) Nucleus accumbens dopamine depletions and time-constrained progressive ratio performance: Effects of different ratio requirements. *Pharmacology, Biochemistry and Behavior*, 64: 21-27

Cousins M., Trevitt J., Atherton A., and Salamone J.D. (1999) Different behavioral functions of dopamine in nucleus accumbens and ventrolateral striatum: A microdialysis and behavioral investigation. *Neuroscience*, 91: 925-934

Cousins M., Finn M., Trevitt J., Carriero D., Conlan A. and Salamone J.D. (1999) The role of ventrolateral striatal acetylcholine in the production of tacrine-induced tremulous jaw movements: A neurochemical and behavioral study. *Pharmacology, Biochemistry and Behavior*, 62: 439-447

Trevitt J., Atherton A., Aberman J. and Salamone J.D. (1998) Effects of subchronic administration of clozapine, thioridazine, and haloperidol on tests related to extrapyramidal motor function. *Psychopharmacology*, 137: 61-66

Salamone J.D., Mayorga A.J., Trevitt J., Cousins M.S., Conlan A. and Nawab A. (1998) Tremulous jaw movements in rats: A model of parkinsonian tremor. *Progress in Neurobiology*, 56: 591-611

Trevitt J., Lyons M., Aberman J., Carriero D., Finn M. and Salamone J.D. (1997) Effects of clozapine, thioridazine, risperidone and haloperidol on behavioral tests related to extrapyramidal motor function. *Psychopharmacology*, 132: 74-81

Abstracts

Conant, A., Trevitt, J.T. (2011) The effect of dopamine, acetylcholine, and adenosine on effort based decision making. *Western Psychological Association*, 3344

Koppitch K., Mehr L., Pando J., Johnson J., Patel N., Trevitt J.T. (2010) The effects of tacrine and caffeine on c-Fos expression in the basal ganglia. *Society for Neuroscience Abstracts*, 491.5

Kawa K., Jalali A., Larsen C., Trevitt J.T. (2008) The effect of adenosine antagonists on two rodent models of tremor: Implications for Parkinson's disease. *American Psychological Association*

Kawa K., Buck C., Greene E., Jalali A., Trevitt J.T. (2008) The effect of adenosine antagonists on two rodent models of tremor. *Western Psychological Association*, 14-15.

Castro-Schilo L., Marelich W., Bailes M., Lundquist J., Trevitt J.T. (2008) Reasons for adopting complementary and alternative medicine: a qualitative investigation. *Western Psychological Association*, 7-4

Roderiguez L., Trevitt J.T. (2007) Adenosine antagonist treatment for an animal model of Parkinsonian gait disturbance. *Society for Advancement of Chicanos and Native Americans in Science*

Kawa K., Jalali A., Buck C., Greene E., Trevitt J.T. (2007) Adenosine antagonists as potential therapeutic compounds for Parkinson's disease: Effects on two rodent models of tremor. *Society for Neuroscience Abstracts* 254.16

Nunes E., Trevitt J. (2006) Adenosine antagonists reverse haloperidol-induced gait disturbances in rats: Implications for Parkinson's disease. *Society for Advancement of Chicanos and Native Americans in Science*

Vallance C., Harris A.M., Jalali A., Castanon T., Madracki M., Nunes E., Trevitt J.T. (2006) Adenosine antagonists restore motor function on a variety of behavioral measures: Implications for Parkinson's disease. *Society for Neuroscience Abstracts* 470.21

Wong-Goodrich S.J.E., Morrow J., Walsh S., Harris A.M., Trevitt J.T. (2005) Adenosine antagonists reverse haloperidol-induced suppression of lever-pressing: Implications for Parkinon's disease. *Society for Neuroscience Abstracts*. 300.9

Wong-Goodrich S., Morrow J., Trevitt J. (2005) Caffeine Reverses Suppression of Lever Pressing in Animal Model of Parkinson's Disease *American Psychological Society*, V-186

Morrow J., Trevitt J.T. (2004) Possible effects of Parkinson's disease on parvalbumin-positive interneurons of the striatum. *Western Psychological Society*. 35.

Trevitt J., Morrow, J. Marshall J. (2003) The effect of eticlopride and cortical stimulation of parvalbumin-positive interneurons in the striatum. *Society for Neuroscience Abstracts*. 601.5

Salamone J., Betz A., Ishiwara K., Wisniecki A., Correa M., Trevitt J., Carlson B. (2003) Animal and human studies assessing the intrinsic anti-Parkinsonian effects of atypical antipsychotics: A theoretical model for explaining motor side effect liability. *Society for Neuroscience Abstracts*. 956.14

Ishiwara K., Betz A., Wisniecki A., Weber S., Huyn N., Trevitt J., Carlson B, Vanover K., Salamone J. (2003) An animal model for assessing the intrinsic anti-Parkinsonian effects of atypical antipsychotics: Possible role of serotonin. *Society for Neuroscience Abstracts*. 956.15

Betz A., Ishiwara K., Wisniecki A., Huyn N., Trevitt J., Salamone J. (2003) An animal model for assessing the intrinsic anti-Parkinsonian effects of atypical antipsychotics: Effects of acute and repeated quetiapine. *Society for Neuroscience Abstracts.* 956.16

Trevitt J., Marshall J. (2002) The effect of central dopamine (DA) depletion on corticostriatalinduced Fos expression in the striatum. *Society for Neuroscience Abstracts.* 264.13

Betz A., Ishiwari K., Hyun N., Trevitt J., Salamone J. (2002) Contrasting behavioral effects of atypical and typical antipsychotic drugs: comparison of the effects of quetiapine and pimozide. *Society for Neuroscience Abstracts.* 893.5

Trevitt J., Marshall J. (2001) The effect of central dopamine (DA) depletion on corticostriatalinduced Fos expression in the striatum. *Society for Neuroscience Abstracts.* 436.7

Trevitt J., Carlson, B., Salamone, J. (2000) Stimulation of D1 receptors in substantia nigra pars reticulata increases extracellular GABA levels: Behavioral and neurochemical evidence. *Society for Neuroscience Abstracts.* 555.14

Carlson, B., Trevitt, J., Correa, M., Salamone, J. (2000) Effects of drugs that act on dopamine D1 and GABA-A receptors in substantia nigra pars reticulata: Behavioral evidence of D1/GABA interactions. *Society for Neuroscience Abstracts*. 555.13

Trevitt, J., Carlson, B. Nowend, K., Cervone, K., Salamone, J. (1999) Substantia nigra pars reticulata is a very potent site for suppression of lever pressing and locomotion by SCH 23390. *Behavioral Pharmacology Society*, 95

Trevitt, J., Carlson, B., Salamone, J. (1999) Electrochemical methods for assessing extracellular GABA in substantia nigra pars reticulata. 8th International Conference on In Vivo Methods, 1.17

Trevitt, J., Carlson, B., Nowend, K., Salamone, J. (1998) Brain dopamine and instrumental behavior: Substantia nigra pars reticulata is the most potent site for suppression of lever pressing by SCH 23390. *Society for Neuroscience Abstracts.* 565.10

Nowend, K., Hamill, S., Trevitt, J., Aberman, J., Salamone, J. (1998) Brain dopamine and instrumental behavior: Accumbens dopamine depletions affect time-constrained progressive ratio responding for food reinforcement. *Society for Neuroscience Abstracts.* 565.11

Mayorga, A., Trevitt, J., Conlan, A., Gianutsos, G., Salamone, J. (1998) Animal models of parkinsonian symptoms: Neostriatum and substantia nigra pars reticulata are involved in the antitremorogenic effects of SKF 82958 (APB). *Society for Neuroscience Abstracts*. 673.12

Carlson, B., Trevitt, J., Salamone, J. (1998) Animal models of parkinsonian symptoms: Effects of diphenhydramine resemble those of clozapine and olanzapine on tests related to extrapyramidal motor function in rats. *Society for Neuroscience Abstracts.* 863.15

Aberman, J., Trevitt, J., Nowend, K., Carlson, B., Lin, S., Makriyannis, A., Salamone, J. (1998) Studies of cannabinoid metabolism: Effects of amidase inhibition. *Society for Neuroscience Abstracts.* 487.11

Trevitt, J., Conlan, A., Finn, M., Salamone, J. (1997) Animal models of parkinsonian symptoms: The role of substantia nigra pars reticulata amino acid mechanisms in the generation of tremulous jaw movements in rats. *Society for Neuroscience Abstracts.* 182.13

Gianutsos, G., Trevitt, J., Nawab, A., Salamone, J. (1997) Animal models of parkinsonian symptoms: Effects of typical and atypical antipsychotics on tests related to extrapyramidal motor function in rats. *Society for Neuroscience Abstracts.* 182.11

Trevitt, J., Lyons, M., Salamone, J. (1996) Animal models of parkinsonian symptoms: Effects of clozapine, haloperidol and thioridazine on cholinomimetic-induced tremulous jaw movements. *Society for Neuroscience Abstracts.* 833.4

References

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