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PROFESSIONAL EXPERIENCE

July 2009 to present: Assistant Professor, Dept. of Pharmaceutical Sciences, Nova Southeastern University, Ponce, Puerto Rico.

January 2009 to May 2009: Adjunct Professor. Department of Allied Health Professions and Department of Biology, University of Puerto Rico at Ponce, Ponce, PR. Teaching Biological Sciences and Anatomy and Physiology.

January 2009 to May 2009: Adjunct Professor. Department of Biology, Pontifical Catholic University of Puerto Rico, Ponce, PR. Teaching Anatomy and Physiology to nursing students.

September 3rd 2008 to December 2008: Part-time Assistant Professor. Department of Psychology, Ponce School of Medicine: One-day-a-week teaching of Neuroscience lecture and laboratory to student in the Clinical Psychology-PhD program.

August 2007 to May 2008: Adjunct Professor- Anatomy and Physiology. Division of Arts and Sciences. Neumann College, Aston, PA.

September 2006-December 2006: Journal Club Instructor, Brain and Mind Course. 2nd year medical students: Weill Cornell Medical College, New York, NY.

June 2006- February 2007. Supervised high school student Miss Sana Khalid on the project entitled: *Role of Estrogen Receptor Beta on Opioids and Opioid-related Peptides in the Rodent Dorsal Hippocampal Formation*. This project won third prize in the Intel International Science and Engineering Fair, New Mexico, May 13-19, 2007.

October 2004-December 2004: Adjunct Professor- Anatomy and Physiology. Department of Biology, College of Staten Island, City University of New York.

May 2004 - June 2004: Neuroanatomy laboratory Instructor for the School of Medicine. Dept. of Physiology and Pharmacology, SUNY Downstate, Brooklyn, NY.

December 2003 and 2004: Lecturer, SUNY Downstate Graduate School Course: Cellular and Molecular Neuroscience. *Behavioral Conditioning Paradigms Used in Neuroscience*.

August 2001 – December 2001: Neuroanatomy laboratory instructor for the Psychology Doctorate Program, Ponce School of Medicine, Ponce, Puerto Rico.

EDUCATION

August 2007 to July 2008: Part-time Postdoctoral Fellow, Dept. of Neurology and Neuroscience, Division of Neurobiology, Weill Medical College of Cornell University, New York, NY.

August 2005 to July 2007: **Postdoctoral Fellow**, Dept. of Neurology and Neuroscience, Division of Neurobiology, Weill Medical College of Cornell University, New York, NY.

May 2005: Ph.D. in Neural Sciences and Behavior, State University of New York (SUNY), Downstate Medical Center, Brooklyn, New York

September 2002-May 2005: Graduate student, Department of Physiology and Pharmacology, SUNY Downstate Medical Center, Brooklyn, New York.

August 1999- July 2002: Graduate student, Department of Physiology, Ponce School of Medicine (PSM), Ponce, Puerto Rico.

1995-1999: B.S. in General Sciences, University of Puerto Rico, Cayey Campus, Cayey, Puerto Rico. **Magna-Cum Laude**.

Special courses:

April 2006: National Institute of Drug Abuse (NIDA) Research Training Institute: April 18-19, 2006 North Bethesda, MD

August 2003: Summer course: Cell Biology of Addiction, Cold Spring Harbor Laboratories, Cold Spring Harbor, New York.

June 2002- July 2002: Summer Program in Neuroscience, Ethics and Survival (SPINES) Marine Biological Laboratories, Woods Hole, Massachusetts.

HONORS AND AWARDS

June 2006: International Narcotics Research Conference Travel Award to attend the annual meeting held in St. Paul MN, June 9-14th.

April 2006: Neurobehavioral Teratology Society (NBTS), **New Investigator Award**: *Prenatal cocaine dampens behavioral responses to methylphenidate in adolescent rats*. Presented at the annual NBTS meeting in Tucson, AZ, June 26, 2006.

June 2005: College on Problems of Drug Dependence Underrepresented Minorities Travel Award to attend the annual meeting held in Orlando, FL from June 18-23.

June 2004: Neurobehavioral Teratology Society Conference (Travel) Award to attend the annual meeting held at Vancouver, British Columbia from June 27-30.

June 2004: College on Problems of Drug Dependence Women and Gender Junior Investigator Travel Award to attend the annual meeting held in San Juan, Puerto Rico from June 12-17.

July 2002 to 2005: American Psychological Association Diversity Program in Neuroscience Fellowship for Predocotrual students in neuroscience.

September 2000-2002: Porter Physiology Development Fellowship from the American Physiological Society for Predoctoral physiological sciences students.

September 2000: Merck Fellow in Honor of Merck & Co., Inc. for the highest- ranking applicant for a new fellowship: Porter Physiology Development Fellowship.

June 1999: University of Puerto Rico President's Recognition for Academic Excellence, Rio Piedras, Puerto Rico

May 1999: Highest GPA in the General Science Department University of Puerto Rico at Cayey

PROFESSIONAL ORGANIZATIONS

American Association of Colleges of Pharmacy

National Hispanic Science Network on Drug Abuse

Society for Neuroscience

American Physiological Society

New York Academy of Sciences

Neurobehavioral Teratology Society

- Associate member representative in Council, 2004-2005.

SUNY Downstate Graduate School Student Council

- Treasurer 2003-2004

CURRENT RESEARCH SUPPORT

Nova Southeastern University, Chancellors Faculty Research and Development Grant.

Title: Role of ovarian hormones on the development of depression using a rat model

Funding period: 10/18/10 to 12/22/11. Role: P.I.

Nova Southeastern University, Health Professions Division Research Grant. Title: Estrogen modulation of neurotrophin and opioid systems in the female hippocampus.

Funding period: 3/31/10 to 2/28/12. Role: P.I.

Nova Southeastern University, Chancellors Faculty Research and Development Grant.

Title: Acute Morphine after Fear learning: Implications for Sex specific PTSD Treatment

Funding period: 5/24/11 – 5/23/12. Role: Collaborator

Nova Southeastern University, Health Professions Division Research Grant. Title: The Effects of Chronic Morphine Treatment in Fear Conditioning in Male and Female Rats at Different Stages of the Estrous Cycle.

Funding period: 4/01/11 – 3/31/13. Role: Collaborator

COMPLETED RESEARCH SUPPORT

August 2005 – July 2008: **NIH Minority Post-doctoral Research Supplement: DA08259.**

PUBLICATIONS

Peer-reviewed publications:

1. Gonzales K.L., Chapleau J.D., Pierce J.P., Ketler D.T., Williams T.J., **Torres-Reveron A.**, McEwen B.S., Waters E.M., Milner T.A. (2011) The influences of reproductive status and acute stress on the levels of phosphorylated mu opioid receptor immunoreactivity in rat hippocampus. *Frontiers in Endocrinology*, 2:18 doi: 10.3389/fendo.2011.00018.
2. Williams T.J., **Torres-Reveron A.**, Chapleau J.D., Milner T.A. (2011) Hormonal regulation of delta opioid receptor immunoreactivity in interneurons and pyramidal cells in the rat hippocampus. *Neurobiol Learn Mem*, 95(2): 206-20.
3. Williams T.J., Mitterling K.L., Thompson L.I., **Torres-Reveron A.**, Waters E.M., McEwen B.S., Gore A.C., Milner T.A. (2011) Age- and hormone-regulation of opioid peptides and synaptic proteins in the rat dorsal hippocampal formation. *Brain Research*, 1379:71-85.
4. **Torres-Reveron A.**, Weedon J. and Dow-Edwards, D.L. (2010) Methylphenidate response in prenatal cocaine exposed rats: A behavioral and brain functional study, *Brain Research*, 1337: 74-84.
5. **Torres-Reveron A.**, Williams T.J., Chapleau, T.D., Waters E.M., McEwen B.S., Drake C.T., Milner T.A. (2009) Ovarian steroids alter mu opioid receptor trafficking in hippocampal parvalbumin GABAergic interneurons. *Experimental Neurology*, 219(1): 319-27.

6. **Torres-Reveron A.**, Khalid S., Williams T.J., Waters E.M., Drake C.T., McEwen B.S., Milner T.A. (2009) Hippocampal dynorphin immunoreactivity increases in response to gonadal steroids and is positioned for direct modulation by ovarian steroid receptors. *Neuroscience*, 159(1): 204-16.
7. **Torres-Reveron A.**, Gray J.D., Melton, J.T., Punsoni M., Tabori N.E., Ward M.J., Frys K., Iadecola C., Milner T.A. (2008) Early postnatal exposure to methylphenidate alters stress reactivity and increases hippocampal ectopic granule cells in adult rats. *Brain Res Bull*, 78(4-5): 175-81.
8. **Torres-Reveron A.**, Khalid S., Williams T.J., Waters E.M., Drake C.T., McEwen B.S., Milner T.A. (2008) Ovarian steroids modulate leu-enkephalin levels and target leu-enkephalinergic profiles in the female hippocampal mossy fiber pathway. *Brain Res*. 1232: 70-84.
9. Milner T.A., Drake C.T., Lessard A. Waters E.M., **Torres-Reveron A.**, Graustein B., Mitterling K.L., Frys K. and Iadecola C. (2008) Angiotensin II-induced Hypertension Differentially Affects Estrogen and Progesterone Receptors in Central Autonomic Regulatory Areas of Female Rats. *Experimental Neurol*, 212(2): 393-406.
10. Waters E.M., **Torres-Reveron A.**, McEwen B.S., and Milner T.A. (2008) Ultrastructural localization of extranuclear progesterone receptors in the rat hippocampal formation. *J Comp Neurol*, 511(1): 34-46.
11. Gray J.D., Punsoni M., Tabori N.E., Melton J.T., Fanslow V., Ward M.J., Zupan B., Menzer D., Rice J., Romeo R.D., Brake W.G., **Torres-Reveron A.**, and Milner T.A. (2007) Methylphenidate treatment of juvenile rats has short- and long-term effects on brain areas involved in cognition, motivated behaviors, appetite and stress. *J Neuroscience*, 27(27): 7196-7207.
12. **Torres-Reveron A.**, Hurd, Y.L. and Dow-Edwards D.L. (2007) Gender differences in prodynorphin but not proenkephalin mRNA expression in the striatum of adolescent rats exposed to prenatal cocaine. *Neuroscience Letters*, 421: 213-217.
13. **Torres-Reveron A.** and Dow-Edwards D.L. (2006) Prenatal cocaine dampened behavioral responses to methylphenidate in male and female adolescent rats. *Neurotoxicology and Teratology*, 28, 165-172.
14. **Torres-Reveron A.**, Melnick, S.M., Stephenson, S. I. and Dow-Edwards D.L. (2006) Standardization of a novel blood sampling method through the jugular vein for use in the quantified [¹⁴C] 2-deoxyglucose method. *J Neurosci Methods*, 150(2): 143-9.
15. **Torres-Reveron A.** and Dow-Edwards D.L. (2005) Repeated administration of methylphenidate in young, adolescent and mature rats affects the response to cocaine later in adulthood. *Psychopharmacology*, 181(1): 38-47.
16. Melnick, S.M., **Torres-Reveron, A.**, Dow-Edwards, D.L. (2004) Prewaning cocaine exposure alters brain glucose metabolic rates following repeated amphetamine administration in the adult rat. *Developmental Brain Research*, 153(1): 127-34.

Non peer-reviewed:

17. **Torres-Reveron A.** (2009) Hispanic people start leaping over barriers to better jobs. *Nature*, 460(7258): 949.

Book Chapters:

18. Dow-Edwards DL, **Torres-Reveron A.** Sex differences in the effects of cocaine exposure on dopaminergic systems during brain development. In M. Lewis & L. Kestler (eds.). *Gender Differences Prenatal Substance Exposure*. APA Press, Washington DC, 2012.

Submitted:

19. Cuevas, M., Flores, I., Thompson, K.J., Ramos-Ortolaza, D., **Torres-Reveron, A.**, Appleyard, C.B. Stress exacerbates endometriosis manifestations and inflammatory parameters in an animal model. *Reproductive Sciences, RSCI-11-255*.

Abstracts:

1. D. L. Ramos-Ortolaza, A. Walf, C. Frye and **A. Torres-Reveron**. Changes in hippocampal CRF-like immunoreactivity of ovariectomized and estrogen replaced female rats sequentially tested on the open field and forced swim test. Program No. 282.07. 2011 Neuroscience Meeting Planner. Washington, DC: Society for Neuroscience, 2011. Online.
2. **A. Torres-Reveron**, M. Cuevas, D. Goyco, P. Ortiz, K. Thompson, I. Flores and C. B. Appleyard, Effects of Stress Prior to Endometriosis on Hippocampal and Hypothalamic Corticotropin Releasing Factor Immunoreactivity in Female Rats. 19th Annual Puerto Rico Neuroscience Conference. Interamerican University, Bayamon, Puerto Rico, 2010.
3. **Torres-Reveron**, T.J. Williams, C.T. Drake, T.A. Milner. Effects of ovarian steroids in the subcellular distribution of mu opioid receptors in parvalbumin interneurons of the dentate gyrus. Program No. 729. 2007 Neuroscience Meeting Planner. San Diego, CA: Society for Neuroscience, 2007. Online.
4. **A. Torres-Reveron**, S. Khalid, C. T. Drake, T. A. Milner. Enkephalin and dynorphin immunoreactivities increase in the dorsal hippocampus in response to estrogens and colocalize with estrogen receptor beta in mossy fiber terminals. Program No. 724.6. 2006 Neuroscience Meeting Planner. Atlanta, GA: Society for Neuroscience, 2006. Online.
5. Gray J.D., **Torres-Reveron A.**, Melton J., Punsoni M., Tabori N., Frys K., Iadecola C., Milner T.A. (2006) Developmental treatment with methylphenidate increases stress reactivity and produces neuroanatomical differences in adulthood. *Neurotoxicology and Teratology*, 28:421.
6. **Torres-Reveron A.**, Hurd Y.L., Dow-Edwards D.L. (2006) Prenatal cocaine exposure decreases the expression of prodynorphin mRNA in adolescent female rats while proenkephalin levels remain unaffected. *Neurotoxicology and Teratology*, 28:416.
7. **A. Torres-Reveron**, V. Dasari, R. Menendez-Delmestre, N. Lugo-Escobar, A.C. Segarra, D.L. Dow-Edwards. Alterations in brain glucose metabolism following repeated cocaine in adult rats: Sex and gonadal status. Program No. 799.21. 2005 *Abstract Viewer/Itinerary Planner*. Washington, D.C.: Society for Neuroscience, 2005. Online.

8. **A. Torres-Reveron**, D.L. Dow-Edwards. Prenatal cocaine exposure produces attention impairment only in male rats during the adolescent period. Program No. 118.5. 2004. *Abstract Viewer/Itinerary Planner*. Washington, D.C.: Society for Neuroscience, 2004. Online.
9. **A. Torres-Reveron**, D.L. Dow-Edwards, S. Stephenson, S. Melnick. A novel blood sampling method through the jugular vein for use in the 2-deoxyglucose method. Program No. 431.11. 2004. *Abstract Viewer/Itinerary Planner*. Washington, D.C.: Society for Neuroscience, 2004. Online.
10. **Torres-Reveron A.** and Dow-Edwards D.L. (2004) Prenatal cocaine decreases the behavioral response to methylphenidate in adolescent female rats. *Neurotoxicology and Teratology*, 26(3): 510.
11. **A. Torres-Reveron**, S.M. Melnick, D.L. Dow-Edwards. Ontogeny of methylphenidate sensitization. Program No. 324.13. *2003 Abstract Viewer/Itinerary Planner*. Washington, DC: Society for Neuroscience, 2003. Online.
12. S.M. Melnick, **A. Torres-Reveron**, D.L. Dow-Edwards. Prewaning cocaine exposure alters brain glucose metabolic rates following repeated amphetamine administration in the adult rat. Program No. 856.8. *2003 Abstract Viewer/Itinerary Planner*. Washington, DC: Society for Neuroscience, 2003. Online.
13. **Torres-Reveron, A.** Melnick, S. M., Dow-Edwards, D. L. (2003) Passive avoidance learning of adult female rats exposed to cocaine during preweaning period. *Neurotoxicology and Teratology*, 25: 387.
14. Dow-Edwards, D.L., Melnick, S.M., **Torres-Reveron, A.** (2003) Prenatal Nelfinavir: teratologic study. *Neurotoxicology and Teratology*, 25: 393.
15. **A. Torres-Reverón**, C.A. Jiménez-Rivera, G.J. Quirk (2000) Effects of prior cocaine sensitization on acquisition, extinction and recovery of conditioned fear. *Society for Neuroscience Abstracts* 26: 1314.

MENTORING ACTIVITIES AND GRADUTE COMMITTEE SERVICE:

June 2006 to July 2007. Tanya J. Williams. MD/PHD student. Tri-Institutional Graduate Program. Weill Cornell Medical College.

January 2011 to present. Diana M. Morales. PhD candidate at Ponce School of Medicine. Graduate Committee Member.

January 2011 to present. Dinah L. Ramos-Ortolaza, PhD. Postdoctoral fellow, Dept. of Pharmaceutical Sciences, Nova Southeastern University, Ponce site.

August 2011 to November 2011. Esther Jimenez. PhD candidate at Ponce School of Medicine. Laboratory rotation mentor.

September 2011 to present. John K. Alvarado. RISE program trainee from the University of Puerto Rico at Ponce. Laboratory mentor.