

Elizabeth M. Peckham, Ph.D.

Maiden Name: Lapoczka
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OBJECTIVE

To find a position where my scientific background, problem-solving skills and organizational skills can be utilized and add value to the goals of my employer.

EDUCATION

Doctor of Philosophy, Pharmacology **June 2005**
University of Michigan, Ann Arbor, MI
Dissertation title: "Comparison of mu-Opioid Antinociception in Male and Female Rats"

Bachelor of Science, Biology **May 1999**
Ashland University, Ashland, OH
Magna Cum Laude
Ashland University Presidential Scholarship Recipient

APPLICABLE SKILLS

- **Experimental experience:** warm-water tail withdrawal (rats), rotometry, *in vivo* microdialysis (rats), self-administration (rats), *ex-vivo* GTP γ S, receptor binding, high performance liquid chromatography, immunocytochemistry, Western blot
- **Surgical procedures in rat:** ovariectomy, jugular catheter, cannula for *in vivo* microdialysis (stereotax), adeno-associated viral vector transfection (stereotax), perfusions and brain removal
- **Mentoring:** mentored undergraduate research assistants in the laboratory
- **Writing:** manuscripts of peer-reviewed papers, grant proposals, applications for fellowships
- **Teaching:** teaching assistant for Nursing Pharmacology, guest lecturer for Hormones and Behavior, lecturer for Research Methods in Behavioral and Cognitive Psychology (Upper Level Writing Course)
- **Computer skills:** Microsoft Word, Excel and Powerpoint, GraphPad Prism, Adobe Illustrator

EXPERIENCE

University of Michigan
Ann Arbor, MI

Assistant Research Scientist/Executive Lab Manager May 2008-present

- Design and conduct a variety of experiments to investigate the effects of drug treatment and stress on circadian rhythms
- Manage undergraduate research assistants in conducting successful experimental research.
- Orient new graduate students to laboratory techniques and procedures.

**University of Michigan
Ann Arbor, MI**

Post-doctoral Researcher

September 2005-April 2008

- Designed and conducted a variety of experiments to investigate the rapid effects of estradiol. These included *in vivo* microdialysis, self-administration, rotometry, GTP γ S, adeno-associated viral vector studies, and immunocytochemistry
- Managed a number of undergraduate research assistants in conducting successful experimental research.
- Wrote manuscripts and grant proposals. Prepared and presented talks and posters on research at seminars and national meetings.
- Oriented new graduate students to laboratory techniques and procedures.

Lecturer

January 2008-April 2008

- Lecturer for PSYCH 331: Research Methods in Behavioral and Cognitive Psychology. Class fulfills an Upper Level Writing Requirement for students.
- Organized class and presented lectures on a variety of topics including experimental design, plagiarism, how to give a scientific presentation and peer-review.
- Read and graded research reports, article summaries, and student presentations.
- Held office hours to assist students with assignments.

Graduate Student

September 1999-August 2005

- Designed and conducted experiments to compare sex differences in mu-opioid antinociception in rats at both the behavioral and cellular level. These studies included warm-water tail withdrawal assay, locomotor activity, receptor binding and GTP γ S binding.
- One of the first studies to look at these sex differences at both the behavioral and cellular level.
- Managed numerous undergraduate research assistants in conducting successful experimental research.
- Wrote manuscripts and dissertation. Prepared and presented talks and posters on research at seminars and national meetings.
- Hosted potential graduate students.

Graduate Student Instructor

January 2003-April 2003

- GSI for Pharmacology 210: Pharmacology and Therapeutics for Nursing Students.
- Presented lecture for one class session.
- Lead discussion section to teach and review course material.
- Responsible for proctoring exams.

**Ashland University
Ashland, OH**

Undergraduate Researcher

January 1998-May 1999

- Worked independently on a research project in the lab of Dr. Glenn White.

- Investigated thermotolerance in the model system *C. elegans*.
- Performed research and compiled data for presentation at a national meeting. Data also contributed to a peer-reviewed journal article.

**Ashland Chemical, Specialty Polymers and Adhesives
Ashland, OH**

Quality Assurance Technician September 1997-August 1999

- Responsible for testing of raw materials and final products utilizing a wide variety of tests.
- Responsible for correctly and completely filling out Certificate of Analysis for all products before they could be shipped.
- Recorded and entered all data into a central database.

Engineering Intern, Plioseal Plant May 1997-September 1997

- Assisted plant engineer with various tasks.
- Designed a tensile strength test to test plioseal.
- Designed a manual to streamline packaging of materials.

AWARDS, SCHOLARSHIPS AND FELLOWSHIPS

- ISIS New Investigator Travel Award to the Organization for the Study of Sex Differences (OSSD) Meeting, May 2007, Washington, DC.
- Rackham Graduate Student travel award – Experimental Biology 2005, San Diego, CA.
- Rackham Graduate Student travel award – 2004 College on Problems of Drug Dependence (CPDD) meeting, San Juan, PR.
- ASPET Graduate Student travel award – Experimental Biology 2004, Washington, DC.
- NIDA Women and Gender Junior Investigator Travel Award – 2003 CPDD meeting, Bal Harbour, FL.
- Rackham Graduate Student travel award – 2003 CPDD meeting, Bal Harbour, FL.
- Thomas F. Burks Graduate Student Travel Award – XIVth World Congress of Pharmacology 2002, San Francisco, CA.

TRAINING GRANTS

University of Michigan Reproductive Sciences Training Program 2005-2007
Post-doctoral fellowship T32-HD007048

University of Michigan Substance Abuse Research Center 2002-2004
Graduate Student fellowship T32 DA07267

PUBLICATIONS

(note: Publications listed as either maiden name or married name)

Becker, J.B., von Esenwein, S., **Peckham, E.**, Toran-Allerand, D., Bennett, A., Moussatov, S., Kaplitt, M., Insell, T.R., and Young, L.J. Behavioral effects of viral vector induced over-expression of estrogen receptor alpha in striatum, *in preparation*.

Peckham, E.M. and Traynor, J.R. Sex difference in morphine antinociception in rats is dependent on the route of administration, *in preparation*.

Peckham, E.M., Graves, S.M. and Traynor, J.R. Comparison of mu-opioid stimulated [³⁵S]GTPγS binding in brain slices from gonadectomized male and female Sprague-Dawley rats, *submitted, under revision, Brain Research*.

Peckham, E.M. and Traynor, J.R. (2006). Comparison of the antinociceptive response to morphine and morphine-like compounds in male and female Sprague-Dawley rats. *Journal of Pharmacology and Experimental Therapeutics*, 316, 1195-1201.

Peckham, E.M., Barkley, L.M., Divin, M.F., Cicero, T.J., and Traynor, J.R. (2005). Comparison of the antinociceptive effect of acute morphine in female and male Sprague-Dawley rats using the long-lasting mu antagonist methocinnamox, *Brain Research*, 1058, 137-147.

Massie, M., **Lapoczka, E.M.**, Boggs, K.D., Stine, K.E. and White, G.E. (2003). Exposure to the metabolic inhibitor sodium azide induces stress protein expression and thermotolerance in the nematode *Caenorhabditis elegans*, *Cell Stress and Chaperones*, 8, 1-7.

ABSTRACTS (National or International Meetings)

(note: Abstracts listed as either maiden name or married name)

Davis, B.A., Cummings, J.A., **Peckham, E.M.**, Clinton, S.M., Akil, H., Becker, J.B. (2007). Motivation to self-administer cocaine is dependent upon the novelty seeking behavioral phenotype in female rats, *Society for Neuroscience Meeting 2007*, Program # 271.13.

Peckham, E.M. and Becker, J.B. (2007). Effects on GABA_B agonism on behavior and on estradiol enhanced amphetamine-mediated extracellular dopamine, *Organization for the Study of Sex Differences (OSSD) meeting 2007*, A25.

Peckham, E.M., Musatov, S., Kaplitt, M.G., Becker, J.B. (2006). Estrogen receptor alpha gene expression enhances rotational behavior in female rats, *Society for Neuroscience meeting 2006*, Program # 661.7.

Lapoczka, E.M. and Traynor, J.R. (2005). Comparison of the antinociceptive potency of morphine in male and female Sprague-Dawley rats following different routes of administration, *Experimental Biology 2005 meeting abstracts, The FASEB Journal*, 19, Abstract #623.3.

Lapoczka, E.M. and Traynor, J.R. (2004). Comparison of the antinociceptive response to morphine and codeine in female and male Sprague-Dawley rats, *Sixty Sixth Annual Scientific Meeting of the College on Problems of Drug Dependence, Inc*, Oral Communications III, June 13.

Lapoczka, E.M., Barkley, L.M., and Traynor, J.R. (2004). Comparison of the antinociceptive potency of morphine in male and female rats using the long-lasting mu opioid receptor antagonist methocinnamox, *Experimental Biology 2004 meeting abstracts, The FASEB Journal*, 18, Abstract #635.7.

- Lapoczka, E.M.**, Falgout, M.E., Cicero, T.J., and Traynor, J.R. (2003). Sex differences in Sprague Dawley rats in response to morphine and other mu-opioids: mu receptor binding and G protein activation, *Sixty Fifth Annual Scientific Meeting of the College on Problems of Drug Dependence, Inc*, Oral Communications XIV, June 18.
- Lapoczka, E.M.**, Falgout, M.E., Cicero, T.J. and Traynor, J.R. (2003). Comparison of mu-opioid receptor and [³⁵S]GTPγS binding in male and female rats, *Experimental Biology 2003 meeting abstracts, The FASEB Journal*, 17, Abstract #139.6.
- Lapoczka, E.M.** and Traynor, J.R. (2002). In vitro studies of the potential heroin abuse treatment agent methocloccinamox, *XIVth World Congress of Pharmacology*.
- Lapoczka, E.M.**, Stine, K.E. and White, G.E. (1999). Altered response of dauer mutants to sodium azide exposure and the acquisition of thermotolerance, *12th International C. elegans meeting*.

