CURRICULUM VITAE

Ebany J. Martinez-Finley
Email: ejmartinez@salud.unm.edu

Education:

PhD Candidate	University of New Mexico, Albuquerque, NM
Biomedical Sciences	Concentrations: Neurosciences/Toxicology
	Comprehensive Examination Passed: April 2008
	Degree expected May 2010
2005, B.S., Biology	University of New Mexico, Albuquerque, NM
	Summa Cum Laude
2005, B.S., Spanish	University of New Mexico, Albuquerque, NM
	Magna Cum Laude
2001, HS Diploma	Robertson High School, Las Vegas, NM
	Cardinal Scholar

Honors/Awards:

2009, May	**OGS Earickson Trust Scholarship,** University of New Mexico, Dean of Graduate Studies
2009, February	**2nd Place Oral Presentation Biomedical Sciences Student Research Day,** University of New Mexico School of Medicine
2008, February	**3rd Place Oral Presentation Biomedical Sciences Student Research Day,** University of New Mexico School of Medicine
2007, October	**$300 Graduate Student Travel Award,** Biomedical Sciences Graduate Program, University of New Mexico
2007, March	**$500 Graduate Student Travel Award,** Society of Toxicology
2007, February	**3rd Place Oral Presentation Biomedical Sciences Student Research Day,** University of New Mexico School of Medicine
2005, August	**Pfizer Safety Scholars Graduate Fellowship,** University of New Mexico School of Medicine Graduate Program.
2005, May	**University Honors Program Graduate,** Magna Cum Laude, University of New Mexico.
2005, May	**Best Undergraduate Poster-First Place Award**, Biology Research Day, University of New Mexico.
2004, November	**$250 Poster Award**, University of New Mexico Research and Creativity Symposium
2004, May	**Phi Beta Kappa,** University of New Mexico Chapter
2004, March	**National Institutes of Mental Health Career Opportunities in Research Fellowship (NIMH-COR T34 MH 19101),** University of New Mexico
2004, March	**Minority Undergraduate Student Award,** Society of Toxicology
2003, December	**Golden Key International Honour Society, Vice-president,** University of New Mexico Chapter
2003, January	**Phi Kappa Phi Study Abroad Grant,** Phi Kappa Phi National Honor Society
2002, December	**Phi Kappa Phi National Honor Society,** University of New Mexico Chapter
2001, August	**Regents Scholarship,** University of New Mexico.

Professional Memberships:

Society of Toxicology, Graduate student member

Mountain West Society of Toxicology, Graduate Student Member and Graduate Student Representative 2007-09. Acknowledged in: *Toxicological Sciences*. June 2008. Volume 103 Issue 2

The Science Advisory Board (SAB), member

Institutional/Academic Service:

Graduate and Professional Student Association-Graduate Research and Development Grant (GRD), Vice-Chair, 2008-2009

Graduate and Professional Student Association Representative, 2007-2008

Biomedical Sciences Graduate Student Society, President, 2006-2007

Reader, Graduate Research and Development Grant, University of New Mexico, Feb. 2007

Grants Funded:

Martinez-Finley, EJ. (Fall 2008) Moderate Perinatal Arsenic has Long-term Effects on Learning and Memory Behavior. Ruth L. Kirschstein National Research Service Awards (NRSA) for Individual Predoctoral Fellowships (F31) to Promote Diversity in Health-Related Research (F31ES017196). National Institutes of Environmental Health. Priority Score: 124. Percentile: 3.1.

Martinez-Finley, EJ. (Summer 2008) Mechanisms of Arsenic Neurotoxicity. Graduate and Professional Student Association-Student Research Allocations Committee (SRAC) Grant. University of New Mexico. Amount granted: $300.00

Martinez, EJ. (Spring 2008) Arsenic in New Mexico: Mechanism of Learning Deficits in Exposed Populations. Graduate and Professional Student Association-Graduate Research and Development Grant. University of New Mexico. Amount granted: $3,000.00

Martinez, EJ. (Fall 2007) Arsenic in New Mexico: Identifying the Mechanism of Arsenic Induced Damage. Graduate and Professional Student Association-Graduate Research and Development Grant. University of New Mexico. Amount granted: $3,000.00

Teaching Experience

Teaching Assistant, Pharmaceutical Care Skill Lab II, UNM College of Pharmacy, Pharmacy 704, Spring 2007

Publications:

Martinez-Finley, EJ, M Ali, and AM Allan. Learning Deficits in C57Bl/6 mice following perinatal arsenic exposure: Consequence of lower corticosterone receptor levels? (Manuscript submitted to *Pharmacology, Biochemistry and Behavior*)

Martinez, E.J., B.L. Kolb, A. Bell, D.D. Savage, and A.M. Allan. 2008. Moderate Perinatal Arsenic Exposure Alters Neuroendocrine markers associated with depression and increases depressive-like behaviors in adult mouse offspring. *Neurotoxicology.* 29(4):647-655.

Acknowledged in:

Galindo, R., S. Frausto, C. Wolff, K.K. Caldwell, N.I. Perrone-Bizzozero, and D.D. Savage. 2004. Prenatal Ethanol Exposure Reduces $mGluR_5$ Receptor Number and Function in the Dentate Gyrus of Adult Offspring. *Alcoholism: Clinical and Experimental Research.* 28.29:1587-1597.

In preparation:

Martinez-Finley, E.J. and AM Allan. MAPK signaling pathway dysfunction in adolescent C57Bl/6 offspring following moderate perinatal arsenic exposure. (Manuscript in preparation)

Presentations:

Oral

***Martinez-Finley, E.J.** (2009): Perinatal and Acute Arsenic effects on learning and memory. Neuroscience Data Blitz, Albuquerque, NM

***Martinez-Finley, E.J.** (2009): Arsenic alters stress pathways in the perinatally exposed animal. Student Research Day, University of New Mexico Health Sciences Center, Albuquerque, NM

***Martinez-Finley, E.J.** (2009): Impact of perinatal arsenic exposure on cognition. Pharmaceutical Sciences/Toxicology Seminar Series, University of New Mexico College of Pharmacy, Albuquerque, NM

***Martinez, E.J.**, J. Liu, and A.M. Allan (2008): Moderate Perinatal Arsenic has Long-term Affects on Learning and Memory Behavior and ERK Phosphorylation. Student Research Day, University of New Mexico Health Sciences Center, Albuquerque, NM

***Martinez, E.J.,** M.C. Battersby and A.M. Allan (2007): Moderate Perinatal Arsenic Perturbs the HPA Axis and has Long-term Affects on Learning and Memory Behavior. Neuroscience Data Blitz, Albuquerque, NM

***Martinez, E.J.,** G. Gagnon, L. Grantham, and T.K. Brabham (2007): Safety Pharmacology: Automated Assessments of Neuromuscular Deficits Using Acrylamide in Sprague-Dawley Rats. Student Research Day, University of New Mexico Health Sciences Center, Albuquerque, NM

***Martinez, E.J.,** G. Gagnon, L. Grantham, and T.K. Brabham (2006): Safety Pharmacology: Automated Assessments of Neuromuscular Deficits Using Acrylamide in Sprague-Dawley Rats. Mountain West Society of Toxicology Regional Conference, Phoenix, AZ

***Martinez, E.J.,** C. Wolff, D.D. Savage, and A.M. Allan (2005): Moderate Perinatal Arsenic Exposure Elevates Markers of Serotonergic Neurotransmission in Dorsal Hippocampal Formation of Adult Mice. National Institutes of Mental Health Career Opportunities in Research (NIMH COR) Symposium, Atlanta, Georgia.

Poster

*Varaschin RK., A El-Emawy, **EJ Martinez,** MJ Rosenberg, KG Akers, DA Hamilton, and D.D. Savage. (2009) Prenatal Ethanol-Induced Deficits in Hippocampal Synaptic Plasticity and Metabotropic Glutamate Receptors. Neuroscience Day, University of New Mexico Health Sciences Center, Albuquerque, NM

***Martinez, E.J.**, J. Liu, and A.M. Allan (2008): Moderate Perinatal Arsenic has Long-term Affects on Learning and Memory Behavior and ERK Phosphorylation. Society of Toxicology Conference, Seattle, WA

***Martinez, E.J.,** M.C. Battersby and A.M. Allan (2007): Moderate Perinatal Arsenic Perturbs the HPA Axis and has Long-term Affects on Learning and Memory Behavior. Neurotoxicology Conference, San Antonio, TX

***Martinez, E.J.,** G. Gagnon, L. Grantham, and T.K. Brabham (2007): Assessments of Neuromuscular Deficits using Acrylamide in Sprague-Dawley Rats. Society of Toxicology Conference, Charlotte, NC

***Martinez, E.J.,** G. Gagnon, L. Grantham, and T.K. Brabham (2006): Assessments of Neuromuscular Deficits using Acrylamide in Sprague-Dawley Rats. Pfizer Intern Day, Ann Arbor, MI

*Savage, D.D., **E.J. Martinez** and C.R. Wolff (2006): Prenatal ethanol exposure reduces $mGluR_5$ receptor density in affected offspring. Society for Neuroscience Conference, Atlanta, GA

***Martinez, E.J.,** D.D. Savage and A.M. Allan (2006): Moderate Perinatal Arsenic Exposure Elevates Markers of Serotonergic Neurotransmission in Dorsal Hippocampal Formation of Adult Mice. Society of Toxicology Conference, San Diego, CA

***Martinez, E.J.**, A.M. Allan and D. D. Savage (2004): Moderate Perinatal Arsenic Exposure Elevates Markers of Serotonergic Neurotransmission in Forebrain of Adult Mice. National Institutes of Mental Health Career Opportunities in Research (NIMH COR) Symposium, San Juan, Puerto Rico.

*Aragon, A., **E.J. Martinez,** J. Sanderson, S. Frausto, C. Wolff and D.D. Savage (2004): Effects of Prenatal Ethanol Exposure on G-Protein Coupled Receptor Function. National Institutes of Mental Health Career Opportunities in Research (NIMH COR) Symposium, San Juan, Puerto Rico.

***** Presenter

<u>Research Experience</u>

September 2006-present *UNM Neurosciences/Toxicology Lab* Albuquerque, NM

Graduate Student

Project focuses on the epigenetic changes that are associated with moderate arsenic exposure throughout gestation. Techniques currently used include western blot and immunoprecipitation.

Supervisors: Andrea Allan, PhD (Neurosciences) and Jim Liu, PhD (Toxicology)

June 2006-August 2006 *Pfizer Inc.* Ann Arbor, MI

Intern

Techniques employed included animal behavioral analysis of neurotoxicity.

Supervisor: Michael Bleavins, PhD, DABT and Tiffini K. Brabham, DVM, PhD, DABT., Pfizer Inc

October 2002-May 2006 *UNM Neurosciences Laboratory* Albuquerque, NM

Student Research Assistant

Techniques employed included binding assays, western blots, sectioning, mounting, developing and analyzing of brain tissue. Used a mouse model as a mechanism to study the neurochemical changes in brains of offspring of mothers who consumed moderate amounts of arsenic and ethanol in their drinking water while they were pregnant. Research supported by the National Institutes of Mental Health COR program.

Supervisor: Daniel Savage, PhD., UNM SOM Neurosciences

May 2002-Aug. 2003 *Epidemiology and Cancer Control* Albuquerque, NM

Student Research Assistant

Worked on the 'Cervical Health Histories' study, a CDC funded research study that examined screening, diagnostic and treatment histories of women diagnosed with cervical cancer in New Mexico. Primary aims: to identify screening and treatment system weaknesses in NM. Collaborative project with the New Mexico Department of Health Breast and Cervical Cancer Detection and Control Program (B&CC) Program.

Supervisor: Jan Gaylord-Vanslyke, PhD., Research Scientist Epidemiology and CC

June/July 2003 *New Mexico Department of Health* Santa Fe, NM

Intern

Summer fellowship appointed by Governor Bill Richardson through the New Mexico Fellows Program. Full-time summer position. Compiled a full report of contracts held between the Department of Health and different agencies and contractors throughout New Mexico. Contracts analyzed included JPA's, MOU/MOA and PSC's. Attended various conventions and town-hall meetings concerning public health issues in New Mexico.

Supervisor: Patricia Montoya, Secretary NM Department of Health

June 2000-July 2001 *New Mexico Highlands Biology Lab* Las Vegas, NM

Student Research Assistant

Two full-time summer positions. Planned and designed a research project that dealt with plant plasmids at NMHU. Performed PCR/RTPCR techniques as well as DNA and RNA isolation through a project sponsored by the National Institutes of Health Bridges Summer Research Program. Presented research poster at SACNAS National Conference in September of 2001. Presented a PowerPoint presentation at the Bridges meeting in Albuquerque in August of 2001.

Supervisor: Mary Shaw, PhD NMHU Biology Department

Volunteer Work:

February 2009 *Society of Toxicology* Albuquerque, NM

Reviewer of Spanish Slide Set

Reviewed the Spanish translation of a slide set about Toxicology. Available on the web.

March 2008 *Society of Toxicology: Diversity Issues and Education Committee* Seattle, WA

Peer Mentor Diversity Issues Undergraduate Minority Program

Responsibilities included assisting participants feel at ease, helping answer questions and providing personal insights that encourage students to consider graduate school and a career in research, especially in toxicology. Groups consisted of a SOT Host Mentor (established toxicologist from industry, government or academia), an undergraduate student advisor and undergraduate participants.

May 2007-Oct 2007 *Leukemia and Lymphoma Society: Team in Training* Albuquerque, NM

Nike Women's Half Marathon Participant

Raised money ($3,800) for the Leukemia and Lymphoma Society. Trained and ran the Nike Women's Half Marathon in San Francisco, CA in October 2007.

January 2007-present *UNM Young Alumni Association* Albuquerque, NM

Advisory Committee

Work with staff at UNM Alumni relations to coordinate useful seminars and activities for young alumni.

March 2007/2008 *Central NM Science & Engineering Research Challenge* Albuquerque, NM

Special Award Judge

Judged junior high and high school student posters for the Neuroscience Award.

January 2007 *Our Lady of Fatima Elementary School* Albuquerque, NM

Judge

Judged elementary school science fair projects.

December 2006 *Rio Rancho High School* Rio Rancho, NM

Judge

Judged high school science fair projects.

September 2001-May 2004 *Big Brothers/Big Sisters of NM* Albuquerque, NM

VIDA Tutor

Mentored and tutored an elementary school child once a week through the school-based program of BB/BS of New Mexico.

Training/Special Skills:

- Brain Sectioning using Cryostat
- Behavioral Analysis
- Immunohistochemistry
- Binding Assays
- Western Blots
- Radiation Safety Certification
- Animal Handling and Safety Certification

Languages Spoken:

Spanish, proficient