

## CURRICULUM VITA

### LORA A. BECKER, Ph.D.

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### EMPLOYMENT

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Associate Professor of Psychology	University of Evansville August 2010 – present
Assistant Professor of Psychology	University of Evansville August 2000 - June 2010
Visiting Professor of Psychology	University of Evansville August 1999 - June 2000
Instructor of Psychology	Binghamton University (SUNY-Binghamton) 1996 - 1999
Research Assistant	Binghamton University (SUNY-Binghamton) 1994, 1995
Research Assistant	Wright State University 1991 - 1992

### EDUCATION

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Ph.D., 2002 Psychology - Behavioral Neuroscience  
State University of New York at Binghamton, Binghamton, NY  
Dissertation Thesis Title: Pattern of Light Induced Fos Expression in the Neonatal Rat  
Suprachiasmatic Nucleus: Relationship to Subpopulation of Cells and Motor Output  
Advisor: Maria-Teresa Romero, Ph.D.

M. A., 1995 Psychology - Psychobiology  
State University of New York at Binghamton, Binghamton, NY  
Master Thesis Title: Fetal Rat Responses to an Artificial Nipple: Dopamine Involvement  
Advisor: William P. Smotherman, Ph.D.

B. S., 1992 Dual Degree in Biology and Psychology  
Wright State University, Dayton, OH  
Undergraduate Thesis Title: Further Characterization of the Behavioral Effects of Peripherally  
Administered Corticotrophin Releasing Factor (CRF) in Guinea Pigs  
Advisor: Michael B. Hennessy, Ph.D.

### HONORS

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- Teacher of the Month for April 2009. Phi Mu Chapter at the University of Evansville
- Deans Teaching Award 2007. College of Arts and Sciences, University of Evansville
- Named “Vagina Worrier” by Women’s Awareness Group 2006
- Nominated for Evansville Leadership Award 2004.
- The Dean’s Award: Advisor of the Year 2004. University of Evansville.
- Chi Omega Professor of the Year 2004. University of Evansville.
- Nominated for Evansville Leadership Award 2003.

- Teacher of the Month for October 2001. Phi Mu chapter at University of Evansville.
- Excellence in Teaching Award for Graduate Students, Office of Graduate Studies and Teaching, Binghamton University, Binghamton, NY Spring, 1999
- Sandra G. Weiner Student Travel Award for Undergraduates, International Society for Developmental Psychobiology, 1995
- First place – Sigma Xi Student Research Colloquium Speech Competition, Undergraduate Division. Wright State University, Dayton, OH. 1992

## **SCHOLARSHIP**

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### **PUBLISHED RESEARCH ARTICLES**

**Becker, L.A.**, Kunkel, A. J., Brown, M., Ball, E. E., Williams, M.T. (2005). Effects of dietary phytoestrogen exposure during perinatal period affects male offspring: daily weight, anogenital distance, USV & testosterone levels. *Neurotoxicology and Teratology*, 27(6) 825 - 834.

Petrov, E.S., Varlinskaya, E.I., **Becker, L.A.**, & Smotherman, W.P. (1998) Endogenous Mu opioid systems and suckling in the neonatal rat. *Physiology and Behavior*, 65, 591 - 599.

**Becker, L.A.**, & Hennessy, M.B. (1993). Further characterization of the behavioral effects of peripherally administered corticotrophin releasing factor (CRF) in guinea pigs. *Pharmacology Biochemistry & Behavior*, 44, 925 - 930.

Hennessy, M.B., O'Neil, D.R., **Becker, L.A.**, Jenkins, R., Williams, M.T., & Davis, H.N. (1992). Effects of centrally administered CRF and alpha-helical CRF on the vocalizations of isolated guinea pig pups. *Pharmacology Biochemistry & Behavior*, 43, 37 - 43.

Hennessy, M.B., **Becker, L.A.**, & O'Neil, D.R. (1991). Peripherally administered CRH suppresses the vocalizations of isolated guinea pig pups. *Physiology & Behavior*, 50, 17 - 22.

### **INVITED TALK**

**Becker, L.A.** (September 2007) A Developmental Case of Environmental Effects on Emotional Expression. Crick Lectures in Cognitive and Neural Science, University of Evansville. September 13th, 2006

**Becker, L.A.** (February, 2005; September, 2005). Sure! Blame it all on Mother. Wednesday Mornings at UE Lecture series, University of Evansville.

**Becker, L.A.** (February, 2005) Drug Enhanced Learning. Andiron Lecture, University of Evansville.

**Becker, L.A.** (October, 2003). The healing touch: Tiffany Field. Wednesday Mornings at UE Lecture series, University of Evansville.

**Becker, L.A.** (December, 2003). The Human Machine: a rate limiting factor for business. Andiron Lecture, University of Evansville.

**Becker, L.A.** (March, 2001). Why do we have a brain? All eyes looking back at evolution. Darwin Day Presentation, University of Evansville

**Becker, L.A.**, Petrov, E.S., & Varlinskaya, E.I. (1995). Endogenous Mu opioid systems regulate responses to ecologically relevant stimuli in neonatal rats. International Society for Developmental Psychobiology. Anaheim, CA.

## **POSTERS**

Bies, A. J., King, M., **Becker, L. A.** (2009) Anxiolytic effect of prenatal phytoestrogen exposure on social interaction behaviors in peripubescent rats. International Society for Developmental Psychobiology. Chicago, Illinois.

Bies, A. J., Sigler, B., Reuter, S. R., **Becker L. A.** (2009) Overhand throwing in adaptation to prism lenses generalizes to other throwing motions. Society for Neuroscience, Chicago, Illinois

**Becker, L. A.**, Knust, K., Umans, R., Sipes. (2009) Investigation of anxiety responding and reaction time in college women either naturally cycling or on oral contraceptives. *Society for Neuroscience*, Chicago, Illinois

Karimi, I., Yousofi, M., **Becker, L.A.**, Moghaddam, A. (2009) The effects of Cannabis Sativa L. seed on postnatal reproductive and neurobehavioral end points in rats. *10th Iranian Congress of Toxicology and Poisoning*, Tehran, Iran, May 18 – 20, 2009.

**Becker, L.A.**, Parker, K.L., Stewart, P.A., Lawler, B., Burns, L.N., Yeager, J.R. (2008) Perinatal dietary phytoestrogen exposure alters USV expression dependent on age environmental temperature and gender. (2008). International Behavioral Neuroscience Society, St. Thomas

Burns, L., Brown, M., Gadiant., Yeager, J., Lawler, B., Jones, N., Pleen, J., **Becker, L.** (2006). Dietary phytoestrogen exposure during perinatal period effect on ultrasonic vocalizations, open field, and play behavior activity in rats. Symposium for Young Neuroscientists and Professors of the Southeast, Davidson College, North Carolina

Brown, M., Ball, E.E, Williams, M.T., Snyder, M.T., & **Becker, L.A.** (2003). Dietary phytoestrogen exposure during perinatal period affects male offspring: daily weight, anogenital distance, USV & testosterone levels. International Society of Developmental Psychobiology, New Orleans, Louisiana

Kunkel, A.J, & **Becker, L.A.** (2003). Ultrasonic vocalizations altered due to testing time and a change in dietary phytoestrogen intake during gestation and nursing. International Behavioral Neuroscience Society, San Juan Puerto Rico.

Johnson, J.R., Williams, M.T., & **Becker, L.A.** (2001). Increased dietary phytoestrogen intake during gestation and nursing alters anogenital distance, isolation-induced ultrasonic

vocalizations, and adult testosterone titers of offspring. International Behavioral Neuroscience Society, Cancun, Mexico.

**Becker, L.A.**, & Romero, M.-T. (2001). FOS response to light in the neonatal suprachiasmatic nucleus differs from adult rats. International Behavioral Neuroscience Society, Cancun, Mexico.

**Becker, L.A.**, Bonaventura, L.R., & Romero, M.-T. (1999). Light-induced expression of Fos and P-CREB in the Suprachiasmatic nucleus (SCN) and intergeniculate nucleus (IGL) of neonatal rats. Society for Neuroscience, 459.21. Miami, Florida

**Becker, L.A.**, Fish, M.D., & Romero, M.-T. (1997). Light sensitivity and ontogeny of endogenous activity in the suprachiasmatic nucleus of neonatal rats determined by c-Fos immunoreactivity. International Society for Developmental Psychobiology. Miami, Florida

Fish, M. D., **Becker, L.A.**, & Romero, M.-T. (1997). Developmental changes in c-Fos expression in the suprachiasmatic nucleus of the rat. Undergraduate Research Fair Binghamton University, 15.

Varlinskaya, E.I., Petrov, E.S., **Becker, L.A.**, & Smotherman, W.P. (1996). Neonatal responses to a surrogate nipple: MU opioid system. Society for Neuroscience, 784.4. Washington, D.C.

**Becker, L.A.**, Robinson, S.R., & Smotherman, W.P. (1994). The dopamine D2/D3 agonist quinpirole promotes responding to an artificial nipple in the newborn rat. International Society for Developmental Psychobiology. Clearwater, Florida.

**Becker, L.A.**, Varner, J.A., Dokas, L., & Isaacson, R.L. (1994). Nimodipine exposure corticosterone levels and plus maze. Society for Neuroscience 36. New Orleans, Louisiana.

**Becker, L.A.**, Robinson, S.R., & Smotherman, W.P. (1994). Fetal responses to an artificial nipple: Dopamine regulation. International Behavioral Neuroscience Society. Florida Keys.

Williams, M.T., **Becker, L.A.**, Nolan, D., & Hennessy, M.B. (1992). CRF: Further characterization of behavioral effects on guinea pig pups. International Society for Developmental Psychobiology. Anaheim, California.

Hennessy, M.B., O'Neil, D.R., **Becker, L.A.**, Jenkins, R., Williams, M.T., & Davis, H. N. (1991). Central and peripheral effects of corticotrophin releasing factor (CRF) on behavior in guinea pig pups. International Society for Developmental Psychobiology. New Orleans, Louisiana.

**GRANT ACTIVITIES**

UExplore Research Grant to Rebecca Totton, Bethany Sanstrum and Lora Becker “A developmental study of dietary phytoestrogen exposure during the perinatal period: Effects on ultrasonic vocalizations and open field behavior”. Summer 2010 Received \$8722.00

UExplore Research Grant to Alan Barker, Shane Reuter and Lora Becker “Effects of 5-HT<sub>2a</sub> receptor blockade on adult-male Sprague-Dawley performance of Morris Water Maze spatial memory task.” fall 2009 Received \$1000

UExplore Research Grant to Shane Reuter, Alan Barker and Lora Becker “Effect of chronic 2,5-dimethoxy-4-iodoamphetamine (DOI) administration on spatial learning and memory in adult male Sprague-Dawley rats” fall 2009 Received \$1000

National Science Foundation Research Experience for Undergraduates (REU) to Lora Becker, Elizabeth Hennon, Kristy Miller and Margaret Stevenson “Summer Research in the Cognitive and Neural Sciences” fall 2009 Submitted \$359,400.00

ARSAF grant to **Lora Becker** “Emotional Responding and Learning in Weanling Rats with Fetal and Neonatal Exposure to Dietary Phytoestrogens” University of Evansville, Spring 2009 \$800

UExplore Research Grant to Robyn Umans, Kymerly Knust and **Lora Becker** “Investigation of anxiety responding and reaction time in college women either naturally cycling or on oral contraceptives” University of Evansville, Fall 2008 \$1000

UExplore Research Grant to Alan Barker, Shane Reuter and **Lora Becker** “Effect of 2,5-dimethoxy-4-iodoamphetamine (DOI) on Novel Object Recognition (NOR) in adult male Sprague-Dawley Rats” University of Evansville, Spring 2009 \$1000

UExplore Research Grant to Alexander Bies and **Lora Becker** “Generalization of motor movement during prism adaptation” University of Evansville, Spring 2009 \$340

UExplore Research Grant to Kellen Clark and **Lora Becker** “Sexual Attitudes and Behaviors of College Students on a Small Midwestern Campus” University of Evansville, fall 2006 \$330

UExplore Undergraduate Research Grant to Lindsey Burns, Joseph Pleen & **Lora Becker** "The Effects of Prenatal Phytoestrogen Exposure in Rats on Social Behaviors as Exhibited by the Ultrasonic Vocalizations of Rats" University of Evansville, Fall 2004 \$1672

UExplore Undergraduate Research Grant to Michelle Brown & **Lora Becker** “The Effects of Prenatal Phytoestrogen Exposure in Rats on Social Behaviors” University of Evansville, Fall 2003 \$526.48

UExplore Undergraduate Research Grant to Erin Ball & **Lora Becker** “The effects of phytoestrogens on the brain development of male rats” University of Evansville, Summer 2003 \$4,758.00

UExplore Undergraduate Research Grant to Annie Harmon & **Lora Becker** "Hormonal and Behavioral Investigation of Fetal and Neonatal Exposure to Phytoestrogens in Rats" University of Evansville, Spring 2002.

ARSAF Grant, **Lora Becker**. Histological, Neuroendocrine, and Behavioral Investigation of Fetal and Neonatal Exposure to Phytoestrogens in Rats. University of Evansville, Spring 2002 \$1970

ADVANTAGE Undergraduate Research grant, Rebecca Odle and **Lora Becker**. Identification of Phytoestrogens in Rat Chow using Liquid Chromatography. University of Evansville, Spring 2002 \$500

ADVANTAGE Undergraduate Research grant, Thea Freygang and **Lora Becker**. Studying Abroad and its Role in Higher levels of Self-Efficacy and Intrinsic motivation in both Undergraduate College Students and Professors. University of Evansville, Fall 2001 \$280

Fall 2001 ART grant was submitted by **Lora Becker** but not awarded due to lack of funds.

Spring 2001 ARSAF grant was submitted by **Lora Becker** but not awarded due to lack of funds.

ADVANTAGE Undergraduate Research grant, **Lora Becker** and Christina Moorman. The Effects of Feedback on Academic Performance with Locus of Control as a Mediator. University of Evansville, Fall 2000. \$310

ADVANTAGE Undergraduate Research grant, **Lora Becker** and Jessica Johnson, Investigation of Phytoestrogen Effects in the Developing Male Animal. University of Evansville, Fall 2000. \$500

ADVANTAGE Undergraduate Research grant, **Lora Becker** and Mikaela Petty, Antinociceptive Properties of the GABA<sub>A</sub> Receptor: Central Modulation of Induced TMJ Pain in Rats. University of Evansville, Summer 2000. \$3468 (\$2,500 for student summer housing)

ADVANTAGE Undergraduate Research grant, **Lora Becker** and Jessica Johnson, How Phytoestrogens Effect Male Reproductive Ability: Sperm Count and Testosterone Levels. University of Evansville, Summer 2000. \$3227.30 (\$2,500 for student summer housing)

ARSAF grant, **Lora Becker** "Do Natural Estrogens Disrupt Development? A Behavioral Investigation of Phytoestrogens Effects After Neonatal and pubescent Exposure in Sprague Dawley Rats." University of Evansville, Spring 2000. \$1702

ADVANTAGE Undergraduate Research grant, **Lora Becker** and Mikaela Petty, 'The Development of Nociceptive Properties in GABA<sub>A</sub> Receptors: A Peripheral Model of Induced TMJ Pain in Rats', University of Evansville, Spring 2000. \$451.90

Faculty Innovational Instruction Grant 00FIIG-013 **Professor Becker** and Dr. Lakey from EXCEL organization, University of Evansville, January of 2000.

### **PROFESSIONAL SOCIETIES**

American Association for Laboratory and Animal Science 1999 - present  
Faculty for Undergraduate Neuroscience 1999 - present

International Behavioral Neuroscience Society	1994 - present
International Society for Developmental Psychobiology	1992 - present
Society for Neuroscience	1992 - present
Southwestern Indiana Psychological Association	2001 - 2005
American Psychological Association	2000 - 2004
American Psychological Society	2000 - 2004
Council on Undergraduate Research	1999 - 2001

### **POSITIONS HELD IN PROFESSIONAL SOCIETIES**

Southwestern Indianan Psychological Association –  
Treasurer, 2001 - 2002; Secretary, 2002 - 2003; President, 2003 - 2005

Council on Undergraduate Research – Councilor, 2000 - 2001

International Behavioral Neuroscience Society – Student Board Member, 1994-1995

### **TEACHING**

Teaching responsibilities for the following courses included designing syllabus, lectures, exams, and grading projects, exams and APA style research papers. Course descriptions are available upon request.

Course	Title	Course	Title
PSYC 121	Introduction to Psychology	PSYC 355	Sensation and Perception
PSYC 125	Introduction to Neuroscience	PSYC 357	Physiological Psychology
PSYC 125- Honors	Introduction to Neuroscience	PSYC 358	Physiological Psychology Laboratory
PSYC 245	Statistics for Psychology with Laboratory	PSYC 416	Human Sexuality
PSYC 246	Research Methods with Laboratory	PSYC 450	Learning
		PSYC 457	Advanced Neuroscience

### **WORKSHOPS**

Center for Teaching Excellence. Learner-Centered Teaching Group. UofE Spring 2009.

Center for Teaching Excellence. Teaching Strategy Group. University of Evansville Fall 2002.

Center for Teaching Excellence. Tenure Group. University of Evansville Spring 2002.

Center for Teaching Excellence. Teaching Group. University of Evansville Fall 2001.

### **TALK**

Kassenow, P. & Becker, L.A. (2001). Taking the Fear out of Physiological Psychology. Midwestern Association Conference on Teaching of Psychology. Evansville, IN

## **SERVICE**

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Director of Major Discovery Program (for undeclared students), July 2008 - present

Design and implement the Major Discovery Program for Undeclared Majors

Scholarship Day spring 2009

Enlist faculty as advisors for the Major Discovery Program

Organize faculty volunteers for admissions events (Open House, Scholar Day, Road Trip, Fall Friday) and registration SOAR I, II, III/STAR I,II

Send Scholarship congratulation letters to Undeclared Majors (Discovery Students)

Coordinate Major Fair Event with Career Services, Dean of the College of Arts and Sciences and Center for Academic Advising

Coordinate academic advisors for Major Discovery Program students

Educate faculty advisors on practices and opportunities of the program

Coordinate and organize social events for Major Discovery Program Events

Update and promote all literature, course catalog, and web presence

Consult with Dr. Calovini on "Journeys and Discoveries" course for program participants

Proposed a Scholarship for students who complete the Major Discovery Program

Insure students in the program choose a major for a timely graduation

Continue to improve and enhance the programs promotion and success

Director of Academic Assessment, June 2005 - June 2008

Assist the VPAA with names of Assessment Committee members for the current year

Meet with new faculty during Fall Faculty Conference

Meet with World Cultures Faculty about Collegiate Learning Assessment (CLA)

Meet with new students during Welcome Week

Conduct monthly Assessment Committee meetings

Review department assessment reports on a rotating three-year basis (10-15 reports/year)

Update the Assessment Resource Manual, adding several resource pages

Put Assessment Resource Manual online and reduced printing costs

Work with Director of Institutional Research in implementing University-wide assessments (NSSE, CLA, etc.) and data management.

Report Assessment Activities to the University of Evansville Board of Directors

Inform Department Chairs of assessment reporting cycle and assign committee liaisons

Collect and maintain departmental assessment reports

Serve on Writing Subcommittee

Serve on General Education Committee

Serve on Retention Committee

Meet with any administrator or faculty that needs assessment advice

Attend assessment conferences to keep updated on latest advances (CLA and AI)

2005 met with HLC accreditation interviewers.

## **UNIVERSITY SERVICE COMMITTEES**

Academic Assessment Committee 2005 - present, Chairperson 2005 - 2008

Academic Services Committee 2002 – 2005, Recording Secretary 2010 - 2013

Ad hoc committee to oversee the Interdisciplinary Studies Program 2005

Berger Award Committee 2005 - present  
General Education Committee, Assessment Representative 2005 - 2008  
General Education Steering Committee 2007 - 2008  
Institutional Research Board (nee Subcommittee for Protection of Research Subjects (of the Faculty Professional Affairs Committee) 2001 - 2005  
Interdisciplinary Studies Committee 2006 - present, Chairperson 2007 - 2009  
Judicial Board 2004 - 2006  
Martin Luther King Jr. Committee 2003 - 2005, Chairperson 2004 - 2005  
Masters of Public Service Administration Review Committee summer 2005  
Neuroscience Program Coordinator, 2008 - present  
Psychology Department Faculty Search Committee 2005  
Psychology Department Recruitment and Admissions Committee 1999 - present  
Psychology Department Scholarship Day Planning Committee 2009  
Retention Committee, Assessment Representative 2005 - 2008  
Freshman Call Campaign 2007, 2008  
Subcommittee on General Education Revision Process of the General Education Subcommittee of the Curriculum Committee (Nick name Sub Squared) 2006 - 2007  
U\*Envision 2010 Campaign Committee 2007 - present  
Undergraduate Research Committee, University of Evansville, Fall 1999 - Spring 2005  
Promotion Chair Spring 2001 - 2005  
Interim URC Chairperson Spring 2004  
Interim Committee Member Spring 2009  
Undergraduate Research Study Chairperson Spring 2004 - Fall 2005  
Writing Sub-Committee, Assessment Representative 2005 - 2008