

# CURRICULUM VITAE

---

Date: January 8, 2018

## **Claudia Buss, Ph.D.**

Department of Medical Psychology  
Charité Universitätsmedizin Berlin  
Luisenstrasse 57  
10117 Berlin, Germany  
*Telephone:* +49 (0)30 450529222  
*Fax:* +49 (0)30 450529990  
*E-mail:* claudia.buss@charite.de

## EDUCATION

---

- Feb. 2007 – Nov. 2010**    **University of California, Irvine**  
Postdoctoral Researcher,  
Department of Psychiatry and Human Behavior
- Jan. 2003 – Dec. 2006**    **University of Trier, Germany**  
Doctoral Researcher,  
Department of Clinical and Theoretical Psychobiology  
Ph.D.
- Oct. 2003 – Sep. 2005**    **McGill University, Montreal, Canada**  
Doctoral Researcher,  
Departments of Psychiatry, Neurology and Neurosurgery
- Oct. 1997 – Dec. 2002**    **University of Trier, Germany**  
M.Sc. (Diploma) studies in psychology

## ACADEMIC POSITIONS

---

- Since July 2016**    **University of California, Irvine, USA**  
Adjunct Associate Professor,  
Department of Pediatrics
- Since Jan. 2013**    **Charité Universitätsmedizin Berlin, Germany**  
Professor,  
Department of Medical Psychology (tenured since 2016)

- Dec. 2010 – June 2016**    **University of California, Irvine, USA**  
Assistant Professor in Residence (2010-2013),  
Adjunct Assistant Professor (2013-2016)  
Department of Pediatrics
- Feb. 2007 – Nov. 2010**    **University of California, Irvine, USA**  
Postdoctoral Researcher,  
Department of Psychiatry and Human Behavior
- Oct. 2003 – Sep. 2005**    **McGill University, Montreal, Canada**  
Research Associate,  
Departments of Psychiatry, Neurology and Neurosurgery
- May 2000 – Dec. 2002**    **University of Trier, Germany**  
Student Research Assistant

## RESEARCH INTERESTS

---

### Pre- and Postnatal Programming of Life-span Development

- Pre-and Postnatal Programming of Brain Development
- Transgenerational Transmission of Early Life Stress
- Effects of Maternal Stress on Fetal Development and Birth Outcomes
- Developmental Origins of Infant and Adult Health and Disease
- Maternal-placental-fetal Endocrinology and the Biology of the Stress Response in Pregnancy
- Gene-environment Interactions in Human Fetal and Infant Development
- Influence of Sociodemographic and Psychosocial Factors and Health Behaviors on Reproductive and Developmental Health Outcomes
- Ecological Momentary Assessment Methodologies and Applications in Human Pregnancy
- Child Developmental and Health Outcomes
- Neuroimaging of Stress Effects on the Brain Across the Life Span
- Early Life Determinants of Successful Aging

## TEACHING

---

### Charité, Universitätsmedizin, Berlin, Germany

- Since 2013**                      Model Curriculum Human Medicine, Biopsychosocial Aspects in Medicine, Lecture, Module 1

Model Curriculum Human Medicine, Memory and Learning Strategies, Seminar, Module 1

Model Curriculum Human Medicine, Stress and Stress Processing, Seminar, Module 6

Model Curriculum Human Medicine, Ethical Basis for Medical Thinking and Acting: “Planned Children and Design Babies”, Seminar, Modules 9-12

Model Curriculum Human Medicine, Developmental Programming of Health and Disease, Seminar, Module 20

Model Curriculum Human Medicine, The Stressed Brain, Seminar, Module 20

Model Curriculum Human Medicine, Gene\*Environment Interactions, Seminar, Module 31

Model Curriculum Human Medicine, Prenatal Diagnostics, Seminar, Module 33

Health Sciences, Bachelor Studies, Developmental Programming of Health and Disease Prenatal Diagnostics, Lecture

#### **University of California, Irvine, USA**

**Since 2011** Lecture Series in the Development, Health and Disease Research Program for Medical Fellows

**Since 2007** Directed Studies/ Special Studies (Bio Sci/ Soc Eco 198/199) in psychobiology of pregnancy and fetal/ infant development course for undergraduate students

**2007** Co-Instructor: Development, Health, and Disease for graduate and undergraduate students, Spring quarter

#### **University of Trier, Germany**

**2006** Co-Instructor: Neuropattern: Development of a new diagnostic system for stress-related disorders for graduate students, Summer semester

**2005-2006** Selected Questions in Psychobiological Research for graduate students

#### **McGill University, Montreal, Canada**

**2005** Co-Instructor: Psychopathology for medical students, Summer semester

## EXAMINER

1. November 2014, Opponent in dissertation defense, University of Helsinki, Finland.
2. January 2015, Examiner in dissertation defense, Graduate School of Health & Medical Science, University of Copenhagen.
3. Since 2013, Examiner in defense of theses for MD degrees and habilitations, Charité University Medicine Berlin, Germany.

## SUPERVISION OF STUDENTS

### Bachelor Students

1. *Lydia Ebeling*, University of Potsdam, Psychology (Bachelor of Science). Topic: Prenatal Maternal Depression and Attachment Behavior in One Year Old Children. Since March 2016 (co-supervisor).

### Master Students

1. *Alice Kaack*, Free University Berlin, Social, Cognitive and Affective Neurosciences (Master's Degree). Topic: The Role of Immune-Endocrine Interactions in Pre- and Postnatal Depression. June 2015 – May 2016. (1<sup>st</sup> supervisor).
2. *Romy Seidl*, Charité University Medicine Berlin. Medical and Nursing Sciences. Topic: Prevention of Burn-out among Midwives in Training. June 2015 – May 2016.
3. *Georgina Sket*, Free University Berlin, Social, Cognitive and Affective Neurosciences (Master's Degree). Topic: Neonatal Structural Brain Connectivity and Neurocognitive Development during the First Year of Life. June 2015 – May 2016 (1st supervisor).
4. *Philipp Töpfer*, Charité University Medicine Berlin and University of Osnabrück (Diploma in Psychology). Topic: The Influence of Early Life Stress and Current Depression on Immune Function in Pregnancy. Jan – Aug 2014 (1st supervisor).
5. *Clarissa Nafe*, Charité University Medicine Berlin, Medical and Nursing Sciences. Topic: Physical Activity during Pregnancy. Oct 2013 – May 2014 (co-supervisor).

### Doctoral Students

1. Elina Thomas (cand. PhD), Oregon Health and Science University. Topic: Infant Brain Development and Temperament Trajectories. Since August 2017 (co-mentor, advisory committee).
2. Theresa Kleih (cand. Dr. rer.nat.), Charité University Medicine Berlin und Berlin Graduate School of Mind and Brain. Stipend by the Elsa Neumann Foundation. Topic: The Impact of Maternal Childhood Maltreatment on Perinatal Depression Trajectories. Since June 2016 (1<sup>st</sup> supervisor).
3. *Leonie Klaumünzer* (cand. Dr. med.), Charité University Medicine Berlin. Topic: The influence of Omega 3 Fatty Acids on Fetal Brain Development. Since Mai 2015 (1<sup>st</sup> supervisor).
4. *Saskia Schiller* (cand. Dr. med.), Charité Universitätsmedizin Berlin. Pre- and Postnatal Programming of Infant Stress Reactivity. Since October 2014 (1<sup>st</sup> supervisor).
5. *Philipp Töpfer* (cand. Dr. rer.medic.), Charité University Medicine Berlin. Topic: Intrauterine Programming of Maternal Behavior. Since September 2014 (1<sup>st</sup> supervisor).
6. *Nora Moog* (cand. Dr. rer.nat.), Charité University Medicine Berlin und Berlin Graduate School of Mind and Brain. Stipend by the Elsa Neumann Foundation. Topic: The Role of Maternal Thyroid Hormones in Programming Fetal Brain Development. Since January 2013 (1<sup>st</sup> supervisor).
7. *Judith Overfeld* (cand. Dr. rer.nat.), Charité University Medicine Berlin. Topic: The Influence of Early Life Stress on Child Brain Development. Since January 2013 (co-supervisor).

8. *Jerod Rasmussen* (PhD), University of California Irvine, USA. Topic: Fetal Programming of Infant Neural Circuits that Underlie Appetite Regulation. June 2013 – September 2016 (involvement: Doctoral Candidacy Committee, co-supervisor).

### Postdoctoral Students

1. Dr. Jerod Rasmussen, University of California Irvine, Topic: Characterizing Neural Circuits that Control Energy Homeostasis. Since October 2016 (co-supervisor).
2. *Dr. Karen Lindsay*, University of California Irvine, Department of Pediatrics. Topic: Metabolomic Changes over the Course of Pregnancy. Since January 2015 (co-supervisor).
3. *Dr. Alice Graham*, Oregon Health and Science University, NRSAD Fellowship, Topic: Pre- and Postnatal Programming of Infant Neural Networks Implicated in Executive Functioning. Since August 2013 (co-supervisor). Mentor on K99 award (funding pending based on council review in September 2017, impact score: 19)
4. Dr. Molly Fox, University of California Irvine, Department of Psychiatry and Human Behavior. Topic: Intergenerational Transmission of the Effects of Acculturation on Health. February 2013 – November 2014 (co-supervisor).
5. *Dr. Jessica DeHaene*, University of California Irvine, Department of Psychiatry and Human Behavior. Topic: Maternal Nutrition During Pregnancy and Fetal Development. February 2010 – December 2012 (co-supervisor).

### Medical Research Fellows

1. *Satoru Ikenoue*, University of California Irvine, Topic: Intrauterine Stress and Hepatic Blood Flow. Since June 2014 (co-supervisor).
2. Masanao Ohashi, University of California Irvine, Topic: Fetal Predictors of Infant Adiposity. December 2012 – June 2014 (co-supervisor).
3. Kaeko Sumiyoshi, University of California Irvine, Topic: Assessment of Fetal Adiposity Using Ultrasonography. June 2010 – December 2012 (co-supervisor).
4. Annie Nguyen, University of California Irvine, Topic: Quantification of Hepatic Fat in Newborns using Magnetic Resonance Imaging (MRI). December 2010 – June 2012 (co-supervisor).

## RESEARCH GRANTS

---

### Current Funding

1. Principal Investigator (MPI with Tom O'Connor, Pathik Wadhwa, Richard Miller and Hyagriv Simhan)  
*Pre- and Postnatal Exposure Periods for Child Health: Common Risks and Shared Mechanisms*  
NIH – Environmental Influences on Child Health Outcomes (ECHO)  
\$ 18,353,773.00 total costs  
10/01/2016-09/30/2023
2. Principal Investigator  
*Transgenerational Transmission of Maternal Childhood Trauma and its Sequelae*  
European Research Council Starting Grant  
€ 1,200,000 direct costs  
11/2015-08/2022

3. Principal Investigator (MPI with Pathik Wadhwa)  
*Intergenerational Effects of Maternal Childhood Trauma on the Fetal Brain*  
NIH/National Institute of Mental Health (NIMH)  
R01 MH105538  
\$ 2,488,650 direct costs  
06/2015 - 05/2020
4. Principal Investigator (MPI with Pathik Wadhwa)  
*Intergenerational Effects of Maternal Childhood Trauma on the Fetal Brain*  
NIH/National Institute of Mental Health (NIMH)  
Supplement to R01 MH105538  
\$ 94,220 direct costs  
06/2016 - 05/2017
5. Principal Investigator  
*Biological Mechanisms of Transgenerational Transmission of Early Life Stress*  
ERA-NET NEURON European Commission  
\$ 1,196,060 direct costs  
05/2014-10/2017 (including no-cost extension)
6. Co-Investigator (PI of 2 subprojects, Christine Heim PI of center grant)  
*Kids2Health*  
German Ministry of Science and Education  
€ 4,714,452 (total costs)  
10/01/2017-09/30/2021
7. Co-Investigator (Pathik Wadhwa, Sonja Entringer MPIs)  
*Maternal Acculturation in Pregnancy and Infant Adiposity in Mexican Americans*  
NIH/ National Institute on Minority Health and Health Disparities  
\$ 2,381,478 direct costs  
07/01/2016-06/30/2021
8. Co-Investigator (Pathik Wadhwa, Hyagriv Simhan MPIs)  
*Social Disadvantage and Fetal Programming of Newborn-Infant Telomere Biology*  
NIH/National Institute of Aging  
\$ 2,463,696 direct costs  
07/01/2016-06/30/2021
9. Co-Investigator (Christine Heim, PI)  
*Biological Embedding of Maltreatment: Berlin Longitudinal Children Study*  
German Ministry of Science and Education  
\$ 2,154,420 direct costs  
07/01/2013-09/01/2017 (including no-cost extension)

**Previously held/ completed funding**Principal Investigator

10. Principal Investigator  
*Fetal Programming of the Newborn and Infant Human Brain*  
NIH/National Institute of Mental Health  
R01 MH091351  
\$ 2,203,933 direct costs  
12/2010-11/2016 (including a 1-year no-cost extension)
11. Principal Investigator  
*Fetal Programming of Brain Functional Connectivity in Neonates and Infants*  
NIH/National Institute of Mental Health  
Supplement to R01 MH091351  
\$ 322,324 direct costs  
12/2012-11/2016 (including a 1-year no-cost extension)
12. Principal Investigator (Co-PI status with Sonja Entringer)  
*Brown Adipose Tissue and its Metabolic Correlates in Human Newborns and Infants*  
NIH/ National Institute of Diabetes and Digestive and Kidney Diseases  
R21 RDK098765  
\$ 192,344 direct costs  
04/2013-03/2016 (including a 1-year no-cost extension)
13. Principal Investigator (Co-PI status with Damien Fair)  
*Early markers to predict cognition and brain development*  
Gates Foundation  
\$ 100,000 direct costs  
11/14-10/2015
14. Principal Investigator  
*National Children's Study Formative Research Study: Self Report and Biological Measures of Maternal Stress Using Ecological Momentary Assessment (EMA) Methodology*  
NIH/National Institute of Child Health and Human Development  
HHSN-275200503415C  
\$ 236,915 direct costs  
10/2010-09/2012
15. Postdoctoral Research Scholarship Award  
*Maternal Corticotrophin-Releasing Hormone during pregnancy: a predictor for endocrine, cognitive and neural development in six- and seven-year-old Children.*  
DFG (# BU 2160/3-1)  
06/2007-05/2009
16. Doctoral Research Scholarship Award  
*Pre- and Postnatal Programming of the Hypothalamic-Pituitary-Adrenal Axis Related Outcomes.*  
Cusanuswerk  
07/2003-06/2006

Co-Investigator

17. Co-Investigator (Sonja Entringer, PI)  
*Prenatal Stress Biology, Infant Body Composition and Obesity Risk*  
NIH/National Institute of Child Health and Human Development  
R01 HD065825  
\$ 1,965,485 direct costs  
07/2010-06/2016 (including a 1-year no-cost extension)
  
18. Co-Investigator (Pathik D. Wadhwa, PI)  
*EMA Assessment of Biobehavioral Processes in Human Pregnancy*  
NIH/National Institute of Child Health and Human Development  
R01 HD060628  
\$ 2,364,828 direct costs  
02/2010-01/2016 (including a 1-year no-cost extension)
  
19. Co-Investigator (Pathik D. Wadhwa, PI)  
*Fetal Programming of Newborn and Infant Telomere Biology*  
NIH/National Institute of Child Health and Human Development  
Type 3 R01 (competitive supplement) HD-060628  
\$ 498,892 direct costs  
04/13 - 01/2016 (including a 1-year no-cost extension)
  
20. Co-Investigator (Christine Heim, PI)  
*Fetal Programming of Brain Development by Maternal Thyroid Hormone and Interleukin-6*  
Neurocure Excellence Cluster at Charité University Medicine Berlin  
\$ 21,544 direct costs  
09/2015-12/2015
  
21. Co-Investigator (Pathik Wadhwa, PI)  
*National Children's Study Formative Research Study: Self-Reported Stress and Cortisol Measurement. Development of an Optimized Measure of Chronic Stress in Pregnancy.*  
NIH/National Institute of Child Health and Human Development  
HHSN-275200503415C  
\$172,949 direct costs  
10/2010-09/2012
  
22. Co-Investigator (Sonja Entringer, PI)  
*National Children's Study Formative Research Study: Biological Moderators of Cortisol in Pregnancy.*  
NIH/National Institute of Child Health and Human Development  
HHSN-275200503415C  
\$ 236,326 direct costs  
10/2010-09/2012
  
23. Co-Investigator (Tim Wigal, PI)  
*Follow-Up of the Multimodal Treatment Study of Children with Attention Deficit Hyperactivity Disorder (MTA Study)*  
NIH/National Institute of Drug Abuse  
HHSN271200800006C  
\$ 1,299,836 direct costs  
04/2010-09/2012



24. Co-Investigator (Curt A. Sandman, PI)  
*Fetal Programming of Early Development*  
 NIH/National Institute of Child Health and Human Development  
 R01 HD051852  
 \$ 2,418,862 direct costs  
 07/06-07/2012

## SCHOLARSHIPS AND AWARDS

---

### MEMBERSHIPS

**October 2017** Election as a Fellow to the Academy of Behavioral Medicine Research

### RESEARCH AWARDS

**September 2015** Curt Richter Award from the International Society for Psychoneuroendocrinology “*in recognition of distinguished early to mid career scientific contributions at the interface of health-related biological and psychological processes.*”

### RESEARCH SCHOLARSHIPS

**Jun. 2007 – May 2009**

Fellowship by the German Research Foundation (DFG) for postdoctoral research in developmental psychobiology at the University of California, Irvine, USA

**Jul. 2006 – Sep. 2006**

Ph.D. scholarship by the University of Trier, Germany

**Jul. 2003 – Jun. 2006**

Scholarship of the “Cusanuswerk” (Cusanuswerk government scholarship) for Ph.D. studies in Psychology/ Psychobiology at the University of Trier, Germany

### TRAVEL AWARDS

**Nov. 2009**

Developmental Origins of Health and Disease (DOHaD) Society for participation in the society’s annual conference held in Santiago, Chile

**Mar. 2009**

American Psychosomatic Society (APS) for participation in the society’s annual conference held in Chicago, IL, USA

**Feb. 2009**

Stipend to attend the Winter Neuropeptide Conference in Breckenridge, CO, USA from the local organizing committee

- Aug. 2006** Stipend to attend the Lille Summerschool on Neurplasticity over the Lifespan from the local organizing committee and the German Research Foundation (DFG)
- Sep. 2005** German Research foundation (DFG) for participation in the Conference of the International Society for Psychoneuroendocrinology (ISPNE) in Montreal, Canada
- Jul. 2004** International Society for Psychoneuroendocrinology (ISPNE) for participation in the society's annual conference held in Glasgow, UK
- Jul. 2004** German Volkswagen Foundation for participation in the Third Trier Summerschool on Early Programming of Health and Disease, Trier, Germany
- 2003 – 2005** Travel stipends for a collaborative research project by the Douglas Hospital Research Center, McGill University, Canada and the "Cusanuswerk"
- POSTER AWARD**
- Jul. 2006** Lille Summerschool on Neuoplasticity over the Lifespan, Lille, France "Maternal Care Modulates the Relationship between Prenatal Risk and Hippocampal Volume"

## PUBLICATIONS

---

### Journal articles and book chapters, peer-reviewed

H-Index: 35

- J1. Buss C, Wolf OT, Witt J, Hellhammer DH. Autobiographic Memory Impairment Following Acute Cortisol Administration. *Psychoneuroendocrinology*, 2004;29(8):1093-6. Impact-Factor: 4.94
- J2. Wolf OT, Kuhlmann S, Buss C, Hellhammer DH, Kirschbaum C. Cortisol and Memory Retrieval in Humans: Influence of Emotional Valence. *Ann N Y Acad Sci*, 2004;1032:195-7. Impact-Factor: 4.38
- J3. Hellhammer J, Fries E, Buss C, Engert V, Tuch A, Rutenberg D. Effects of Soy Lecithin Phosphatidic Acid and Phosphatidylserine Complex (PAS) on the Endocrine and Psychological Responses to Mental Stress. *Stress*, 2004;7(2):119-26. Impact-Factor: 2.72
- J4. Lupien SJ, Buss C, Schramek T, Maheu F, Pruessner J. Hormetic Influence of Glucocorticoids on Human Memory. *Nonlinearity in Biology, Toxicology and Medicine*, 2005; 3:23-56. Impact-Factor: 1.22
- BC1. Lupien S, Quellet-Morin I, Hupbach A, Tu MT, Buss C, Walker D, Pruessner JC, McEwen BS. *Beyond the Stress Concept: Allostatic Load - A Developmental Biological and Cognitive Perspective, in Developmental and Psychopathology*, Vol 2. Edited by Cicchetti D, Cohen DJ. Hoboken, New Jersey, Wiley, J. & Sons; 2006

- J5. Buss C, Lord C, Wadiwalla M, Hellhammer DH, Meaney MJ, Lupien SJ, Pruessner JC. Maternal Care Modulates the Relationship between Prenatal Risk and Hippocampal Volume in Women but Not in Men. *Journal of Neuroscience*, 2007; 27(10):2592-5. Impact-Factor: 6.34
- J6. Buss C, Schuelter U, Hesse J, Moser D, Phillips DI, Hellhammer DH, Meyer J. Haploinsufficiency of the SERPINA6 Gene is Associated with Severe Muscle Fatigue: A de Novo Mutation in Corticosteroid-Binding Globulin Deficiency. *Journal of Neurotransmission*, 2007; 114(5):563-9. Impact-Factor: 2.87
- B1. Buss C. *Pre- and Postnatal Programming of Hypothalamic-Pituitary-Adrenal Axis Related Outcomes - Potential Causes of Interindividual Variability in Disease Susceptibility*. 2007.
- J7. Lord C, Buss C, Lupien SJ, Pruessner JC. Hippocampal Volumes are Larger in Postmenopausal Women using Estrogen Therapy Compared to Past Users, Never Users and Men: A possible Window of Opportunity Effect. *Neurobiology of Aging*, 2008; 29(1):95-101. Impact-Factor: 5.01
- J8. Pruessner J C, Dedovic K, Khalili-Mahani N, Engert V, Pruessner M, Buss C, Renwick R, Dagher A, Meaney M J, Lupien S. Deactivation of the Limbic System during Acute Psychosocial Stress: Evidence from Positron Emission Tomography and Functional Magnetic Resonance Imaging Studies. *Biol Psychiatry*, 2008; 63(2):234-40. Impact-Factor: 11.21
- J9. Class QA, Buss C, Davis EP, Gierczak M, Pattillo C, Chicz-DeMet A, Sandman CA. Low Levels of Corticotrophin-Releasing Hormone during Early Pregnancy Are Associated with Precocious Maturation Of The Human Fetus. *Dev Neurosci*, 2008; 30:419-26. Impact-Factor: 2.7
- BC2. Wolf O & Buss C. *Effect of Chronic Stress on Cognitive Function through Life. Foresight Mental Capital and Mental Wellbeing Office of Science and Innovation (UK)*, 2008; <http://www.foresight.gov.uk/OurWork/ActiveProjects/Mental%20Capital/ProjectOutputs.asp>
- J10. Entringer S, Buss C, Kumsta R, Hellhammer DH, Wadhwa PD, Wüst S. Prenatal Psychosocial Stress Exposure is Associated with Subsequent Working Memory Performance in Young Women. *Behav Neurosci*, 2009; 123(4):886-93. Impact-Factor: 2.73
- J11. Buss C, Entringer S, Jonazary FR, Chicz-DeMet A, Sandman CA, Waffarn F, Wadhwa PD. The Maternal Cortisol Awakening Response in Human Pregnancy is Associated with the Length of Gestation. *American Journal of Obstetrics and Gynecology*, 2009; 201 (4):398 e1-8. Impact-Factor: 4.70
- J12. Buss C, Davis EP, Class QA, Gierczak M, Pattillo C, Chicz-DeMet A, Glynn L, Sandman CA. Maturation of the Human Fetal Startle Response: Evidence for Sex-specific Maturation of the Human Fetus. *Early Human Development*, 2009; 85(10):633-8. Impact-Factor: 1.79
- J13. Wadhwa PD, Buss C, Entringer S, Swanson J. Developmental Origins of Health and Disease: Brief History of the Approach and Current Focus on Epigenetic Mechanisms. *Seminars in Reproductive Medicine*, 2009; 27:358-368. Impact-Factor: 2.35
- J14. Swanson JM, Entringer S, Buss C, Wadhwa PD. Developmental Origins of Health and Disease: Environmental Exposures. *Seminars in Reproductive Medicine*, 2009; 27:391-402. Impact-Factor: 2.35
- J15. Buss C, Davis EP, Muftuler T, Head K, Sandman CA. High Pregnancy Anxiety during Mid-gestation is Associated with Decreased Gray Matter Density in 6-9 year-old Children. *Psychoneuroendocrinology*, 2010; 35(1):141-53. Impact-Factor: 4.94

- J16. Pruessner JC, Dedovic K, Pruessner M, Lord C, Buss C, Collins L, Dagher A, Lupien SJ. Stress Regulation in the Central Nervous System: Evidence from Structural and Functional Neuroimaging Studies in Human Populations. *Psychoneuroendocrinology*, 2010; 35(1):179-91. Impact-Factor: 4.94
- J17. Wadiwalla M, Andrews J, Lai B, Buss C, Lupien SJ, Pruessner JC. Effects of Manipulating the Amount of Social-evaluative Threat on the Cortisol Stress Response in Young Healthy Women, *Stress*, 2010; 13(3):214-20. Impact-Factor: 2.72
- J18. Hellhammer J, Waladkhani A, Hero T, Buss C. Effects of Milk Phospholipid on Memory and Psychological Stress Response. *British Food Journal*, 2010; 112(10):1124-1137. Impact-Factor: 0.77
- J19. Entringer S, Buss C, Shirlcliff EA, Cammack AL, Yim IS, Chicz-DeMet A, Sandman CA, Wadhwa PD. Attenuation of Maternal Psychophysiological Stress Responses and the Maternal Cortisol Awakening Response (CAR) over the Course of Human Pregnancy. *Stress*, 2010; 13(3):258-68. Impact-Factor: 2.72
- J20. Engert V, Buss C, Khalili-Mahani N, Wadiwalla M, Dedovic K, Pruessner JC. Investigating the Association between Early Life Parental Care and Stress Responsivity in Adulthood. *Developmental Neuropsychology*, 2010; 35(5):570-81. Impact-Factor: 2.24
- J21. Entringer S, Buss C, Wadhwa PD. Prenatal Stress and Developmental Programming of Human Health and Disease Risk: Concepts and Integration of Empirical Findings. *Current Opinion in Endocrinology, Diabetes and Obesity*, 2010; 17(6):507-16. Impact-Factor: 3.37
- J22. Buss C, Davis EP, Hobel, CJ, Sandman CA. Maternal Pregnancy-specific Anxiety is Associated with child executive function at 6-9 years age. *Stress*, 2011; 14(6):665-676. Impact-Factor: 2.72
- J23. Davis EP, Buss C, Head K, Hasso A, Wing DA, Hobel C, Sandman CA. Children's Brain Development Benefits from Longer Gestation. *Frontiers in Developmental Psychology*, 2011; 2:1-7.
- J24. Cammack AL, Buss C, Entringer S, Hogue CJ, Hobel CJ, Wadhwa PD. The Association between Early Life Adversity and Bacterial Vaginosis during Pregnancy. *American Journal of Obstetrics and Gynecology*, 2011; 204(5):431.e1-8. Impact-Factor: 4.70
- J25. Sandman CA, Davis EP, Buss C, Glynn LM. Exposure to Prenatal Psychobiological Stress exerts Programming influences on the Mother and her Fetus. *Neuroendocrinology*, 2012; 95: 8-21. Impact-Factor: 4.37
- J26. Sandman CA, Davis EP, Buss C, Glynn LM. Prenatal Programming of Human Neurological Function. *International Journal of Peptides Int J Pept.* 2011; 2011: 837596. Impact-Factor: 0.91
- J27. Entringer S, Buss C, Andersen J, Chicz-DeMet A, Wadhwa PD. Ecological Momentary Assessment of Maternal Cortisol Profiles Over a Multiple-Day Period Predicts the Length of Human Gestation. *Psychosomatic Medicine*, 2011; 73(6):469-74. Impact-Factor: 3.47
- J28. Muftuler LT, Davis EP, Buss C, Head K, Hasso AN, Sandman CA. Cortical and Subcortical Changes in Typically Developing Preadolescent Children. *Brain Research*, 2011; 1399:15-24. Impact-Factor: 2.84
- J29. Hatfield T, Wing DA, Buss C, Head K, Muftuler LT, Davis EP. Magnetic Resonance Imaging Demonstrates Long Term Changes in Children Born Preterm and Exposed to Chorioamnionitis. *American Journal of Obstetrics and Gynecology*, 2011; 205(4):384.e1-8. Impact-Factor: 4.70

- J30. Wadhwa PD, Entringer S, Buss C, Lu MC. The Contribution of Maternal Stress to Preterm Birth: Issues and Considerations. *Clinics in Perinatology*, 2011; 38(3):351-84. Impact-Factor: 2.44
- J31. Sandman CA, Cordova C, Davis EP, Glynn LM, Buss C. Patterns of Fetal Heart Rate Response at ~ 30 Weeks Gestation Predict Size at Birth. *Developmental Origins of Health and Disease*, 2011; 2(4):212-217. Impact-Factor: 0.75
- J32. Entringer S, Buss C, Swanson JM, Cooper DM, Wing DA, Waffarn F, Wadhwa PD. Fetal Programming of Body Composition, Obesity and Metabolic Function: the Role of Intrauterine Stress and Stress Biology. *Journal of Nutrition and Metabolism*, 2012; 2012:632548. Impact-Factor: 3.26
- J33. Buss C, Davis EP, Shahbaba B, Pruessner JC, Head K, Sandman CA. Maternal Cortisol over the Course of Pregnancy and Subsequent Child Amygdala Volume and Affective Problems. *Proceedings of the National Academy of Sciences of the United States of America*, 2012; 09(20):E1312-9. Impact-Factor: 9.68
- J34. Buss C/Entringer S, Davis EP, Hobel CJ, Swanson JM, Wadhwa PW, Sandman CA. Impaired Executive Function Mediates the Association between Pre-pregnancy BMI and Child ADHD Symptoms. *PLoS One*, 2012; 7(6):E37758. Impact-Factor: 3.23
- J35. Buss C, Entringer S, Swanson JM, Wadhwa PW. The Role of Stress in Brain Development: The Gestational Environment's Long-Term Effects on the Brain. *Cerebrum*, 2012; 4.
- J36. Muftuler LT, Davis EP, Buss C, Solodkin A, Su MY, Head K, Hasso AN, Sandman CA. Development of White Matter Pathways in Typically Developing Preadolescent Children. *Brain Research*, 2012; 1466:33-43. Impact-Factor: 2.84
- J37. Wadhwa PD, Simhan HN, Entringer S, Buss C, Smith R, Hobel CH, Farhana N, Shimmin L, Hixson JE, Sing CF. Variation in the Maternal Corticotrophin Releasing Hormone-Binding Protein (CRH-BP) Gene and Birth Weight in Blacks, Hispanics and Whites. *PLoS One*, 2012;7(9):e43931. Impact-Factor: 3.23
- J38. Buss C, Entringer S, Wadhwa PD. Fetal Programming of Brain Development - Role of Intrauterine Stress and Stress Biology in Susceptibility for Psychopathology. *Science Signaling*, 2012; 5(245):pt7. Impact-Factor: 6.28
- J39. Entringer S, Buss C, Wadhwa PD. Prenatal Stress, Telomere Biology, and Fetal Programming of Health and Disease *Science Signaling*, 2012; 5(248):pt12. Impact-Factor: 6.28
- J40. Entringer S, Eppel ES, Lin J, Buss C, Blackburn EH, Simhan HN, Wadhwa PD. Maternal Psychosocial Stress during Pregnancy is Associated with Newborn Leukocyte Telomere Length. *American Journal of Obstetrics and Gynecology*, 2013; 208(2):134, e1-7. Impact-Factor: 4.70
- J41. Davis EP, Sandman CA, Buss C, Wing DA, Head. Fetal Glucocorticoid Exposure is Associated with Preadolescent Brain Development. *Biological Psychiatry*, 2013; 74:647-655. Impact-Factor: 11.21
- J42. Reynolds R, Labad J, Buss C, Ghaemmaghami P, Räikkönen K. Transmitting Biological Effects of Stress in utero: Implications for Mother and Offspring. *Psychoneuroendocrinology*, 2013; 38(9):1843-9. Impact-Factor: 4.95
- J43. Lin M, Fwu PT, Buss C, Davis EP, Head K, Muftuler TL, Sandman CA, Su MY. Developmental Changes in Hippocampal Shape among Preadolescent Children. *International Journal of Developmental Neuroscience*, 2013; 31(7):473-481. Impact-Factor: 1.15

- J44. Voellmin A, Entringer S, Moog N, Wadhwa PD, Buss C. Maternal Positive Affect over the Course of Pregnancy is Associated with the Length of Gestation and Reduced Risk of Preterm Delivery, *Psychosomatic Research*, 2013; 75:336-340. Impact-Factor: 1.10
- J45. Tamm, L., Epstein, J.N., Lisdahl, K.M., Molina, B., Tapert, S., Hinshaw, S. P., Arnold, L.E., Velanova, K., Abikoff, H., Swanson, J.M., & MTA Neuroimaging Group. Impact of ADHD and Cannabis Use on Executive Functioning in Young Adults. *Drug and Alcohol Dependence*, 2013; 133(2):607-14. Impact-Factor: 1.66
- J46. Rasmussen JM, Entringer S, Nguyen A, van Erp TGM, Guijarro A, Oveisi F, Swanson JM, Piomelli D, Wadhwa PD, Potkin SG/Buss C. Imaging Brown Adipose Tissue in Neonates Using Water-Fat Separated MRI. *PLoS ONE*, 2013; 8(10):e7790. Impact-Factor: 3.23
- J47. Sandman CA, Head K, Muftuler TL, Su MY. Buss C, Davis EP. Shape of the Basal Ganglia in Preadolescent Children is Associated with Cognitive Performance. *Neuroimage*, 2014; 99:93-102. Impact-Factor: 6.36
- J48. Kim DJ, Davis EP, Sandman CA, Sporns O, O'Donnell BF, Buss C, Hetrick WP. Longer Gestation Is Associated with More Efficient Brain Networks in Preadolescent Children. *Neuroimage*, 2014; 100:619-27. Impact-Factor: 6.36
- J49. Sandman CA, Buss C, Head K, Davis EP. Fetal Exposure to Maternal Depressive Symptoms is Associated with Cortical Thickness in Late Childhood. *Biological Psychiatry*, 2015, 77(4):324-34. Impact-Factor: 11.21
- J50. Entringer S, Epel ES, Lin J, Blackburn EH, Buss C, Simhan HN, Wadhwa PD. Maternal Estradiol (E<sub>2</sub>) Concentrations in Early Pregnancy Predict Child Buccal Cell Telomere Length. *Journal of Clinical Endocrinology and Metabolism*, 2015, 100(1):267-273. Impact-Factor: 6.21
- J51. Entringer S, Epel ES, Lin J, Blackburn EH, Buss C, Venkataramanan R, Simhan HN, Wadhwa PD. Maternal Folate Concentration in Early Pregnancy and Newborn Telomere Length. *Annals of Nutrition and Metabolism*, 2015, 66(4):202-208. Impact-Factor: 2.62
- J52. Fox M, Entringer S, Buss C, DeHaene J, Wadhwa PD. Intergenerational Transmission of the Effects of Acculturation on Health in Hispanic Americans: a Fetal Programming Perspective. *Am J Public Health*, 2015, 105 Suppl 3:S409-23. Impact-Factor: 4.55
- J53. Cherel M, Budin F, Prasrawa M, Gerig G, Lee K, Buss C, Lyall A, Konsing KZ, Styner M. Automatic Tissue Segmentation of Neonate Brain MR Images with Subject-specific Atlases. *Proc SPIE Int Soc Opt Eng*, 2015, 9413. doi: 10.1117/12.2082209. Impact-Factor: 0.95
- J54. Lee K, Cherel M, Budin F, Gilmore J, Consing KZ, Rasmussen J, Wadhwa PD, Entringer S, Glasser MF, Van Essen DC, Buss C, Styner M. Early Postnatal Myelin Content Estimate of White Matter via T1w/T2w Ratio. *Proc SPIE Int Soc Opt Eng*. 2015; 9417. pii: 94171R. Impact-Factor: 0.95
- J55. Buss C/Entringer S, Wadhwa PD. Prenatal stress, development, health and disease risk: a psychobiological perspective - 2015 Curt Richter Award Paper. *Psychoneuroendocrinology*; 62:366-375. Impact-Factor: 4.94
- J56. Lindsay KL, Hellmuth C, Uhl O, Buss C, Wadhwa PD, Koletzko B, Entringer S. Longitudinal Metabolomic Profiling of Amino Acids and Lipids across Healthy Pregnancy. *PLoS One*, 2015, 10(12):e0145794. Impact-Factor: 3.54

- J57. Rasmussen JM, Casey BJ, van Erp TGM, Tamm L, Epstein JN, Buss C, Bjork JM, Molina BSG, Velanova K, Mathalon DH, Somerville L, Swanson JM, Wigal T, Arnold LE, Potkin SG, MTA Neuroimaging Group. ADHD and Cannabis Use in Young Adults Examined Using fMRI of a Go/NoGo Task. *Brain Imaging and Behavior*, 2016; 10(3):761-71. Impact-Factor: 4.60
- J58. Moog NK, Buss C, Entringer S, Shahbaba B, Gillen DL, Hobel CJ, Wadhwa PD. Maternal Exposure to Childhood Trauma is Associated during Pregnancy with Placental-Fetal Stress Physiology. *Biological Psychiatry*, 2016, 79(10):831-9. Impact-Factor: 11.21
- J59. Graham AM, Buss C, Rasmusen J, Rudolph MD, Demeter DV, Gilmore JH, Styner M, Entringer S, Wadhwa PD, Fair DA. Implications of Newborn Amygdala Connectivity for Fear and Cognitive Development at 6-months-of- Age. *Developmental Cognitive Neuroscience*, 2016, 18:12-25. Impact-Factor: 3.88
- J60. Kim DJ, Davis EP, Sandman CA, Sporns O, O'Donnell BF, Buss C, Hetrick WP. Children's Intellectual Ability is Associated with Structural Network Integrity. *Neuroimage*, 2016, 124(Pt A):550-6. Impact-Factor: 6.36
- J61. Newman E, Jernigan TL, Lisdahl KM, Tamm L, Tapert SF, Potkin SG, Mathalon D, Molina B, Bjork J, Castellanos F X, Swanson J, Kuperman JM, Bartsch H, Chen C, Dale AM, Epstein JN, & MTA Neuroimaging Group. Go/No Go Task Performance Predicts Cortical Thickness in the Caudal Inferior Frontal Gyrus in Young Adults with and without ADHD. *Brain Imaging and Behavior*, 2016, 10(3):880-92. Impact-Factor: 4.6
- J62. Schoemaker D, Buss C, Head K, Sandman CA, Davis EP, Chakravarty MB, Gauthier S, Pruessner JC. Hippocampus and Amygdala Volumes from Magnetic Resonance Images in Children: Assessing Accuracy of Freesurfer and FSL against Manual Segmentation. *Neuroimage*, 2016, 129:1-14. Impact-Factor: 6.36
- J63. Short SJ, Stalder T, Marceau KP, Entringer S, Moog NK, Shirtcliff EA, Wadhwa PD, Buss C. Correspondence between Hair Cortisol Concentrations and 30-day Integrated Daily Salivary and Weekly Urinary Cortisol Measures. *Psychoneuroendocrinology*, 2016, 71:12-8. Impact-Factor: 4.94
- J64. Entringer S, Buss C, Heim CM. Frühe Stresserfahrungen und Krankheitsvulnerabilität. *Bundesgesundheitsblatt Gesundheitsforschung Gesundheitsschutz*, 2016.
- J65. Ross KM, Miller GE, Culhane JF, Grobman W, Simhan HN, Wadhwa PD, Williamson DF, McDade T, Buss C, Entringer S, Adam EK, Qadir S, Keenan-Devlin L, Leigh AKK, Borders A. Patterns of Peripheral Cytokine Expression during Pregnancy in Two Cohorts and Associations with Measures of Inflammation in Cord Blood. *American Journal of Reproductive Immunology*, 2016, 76(5):406-414. Impact-Factor: 2.92
- J66. Lisdahl KM, Tamm L, Epstein JN, Jernigan T, Molina BS, Hinshaw SP, Swanson JM, Newman E, Kelly C, Bjork JM, MTA Neuroimaging Group. The Impact of ADHD Persistence, Recent Cannabis Use, and Age of Regular Cannabis Use Onset on Subcortical Volume and Cortical Thickness in Young Adults. *Drug Alcohol Depend*, 2016, 161:135-46. Impact-Factor: 3.35
- J67. Entringer S, Buss C, Rasmussen JM, Lindsay K, Gillen DL, Cooper DM, Wadhwa PD. Maternal Cortisol during Pregnancy and Infant Adiposity: a Prospective Investigation. *Journal of Clinical Endocrinology and Metabolism*, 2017, 102(4):1366-1374. Impact Factor: 6.21.
- J68. Moog N, Entringer S, Heim CM, Wadhwa PD, Kathmann N, Buss C. Influence of Maternal Thyroid Hormones during gestation on fetal Brain Development. *Neuroscience*, 2017, 7;342:68-100. Impact-

Factor: 3.36

- J69. Rasmussen JM, Kruggel F, Gilmore JH, Styner M, Entringer S, Consing KN, Potkin SG, Wadhwa PD, Buss C. A Novel Maturation Index Based on Neonatal Diffusion Tensor Imaging Reflects Typical Perinatal White Matter Development in Humans. *International Journal of Developmental Neuroscience*, 2017, 56: 42-51. Impact Factor: 2.4.
- J70. Kelly C, Castellanos FX, Tomaselli O, Lisdahl KM, Tamm L, Jernigan T, Newman E, Epstein JN, Molina B, Grenhill L, Potkin SP, Hinshaw JM, MTA Neuroimaging Group. Distinct Effects of Childhood ADHD and Cannabis Use on Brain Functional Architecture in Young Adults. *Neuroimage: Clinical*, 2016, 13:188-200. Impact-Factor: 3.98
- J71. Hellmuth C, Lindsay K, Uhl O, Buss C, Wadhwa PD, Koletzko B, and Entringer S. Association of Maternal Pre-pregnancy BMI with Metabolomic Profile across Gestation. *International Journal of Obesity*, 2017, 41(1):159-169. Impact-Factor: 5.34
- J72. Davis EP, Head K, Buss C, Sandman CA. Prenatal Maternal Cortisol Concentrations Predict Neurodevelopment in Middle Childhood. *Psychoneuroendocrinology*, 2017, 75:56-63. Impact-Factor: 4.94
- J73. Toepfer P, Heim CM, Entringer S, Binder E, Wadhwa PD, Buss C. Oxytocin Pathways in the Intergenerational Transmission of Maternal Early Life Stress. *Neuroscience & Biobehavioral Reviews*, 2017; 73: 293-308. Impact Factor: 8.6.
- J74. Lindsay KL, Buss C, Wadhwa PD, Entringer S. The Interplay between Maternal Nutrition and Stress during Pregnancy: Issues and Considerations. *Annals of Nutrition and Metabolism*, 2017; 70(3):191-200. Impact Factor: 2.1.
- J75. Qiu A, Shen M, Buss C, Chong YS, Kwek K, Saw SM, Gluckman PD, Wadhwa PD, Entringer S, Styner M, Karnani N, Heim CM, O'Donnell KJ, Holbrook JD, Fortier MV, Meaney MJ, the GUSTO study group. Effects of Antenatal Maternal Depressive Symptoms and Socio-economic Status on Neonatal Brain Development are Modulated by Genetic Risk. *Cerebral Cortex*, 2017; 27(5):3080-92. Impact Factor: 8.29.
- J76. Buss C, Entringer S, Moog N, Toepfer P, Fair DA, Simhan HN, Heim CM, Wadhwa PD. Intergenerational transmission of maternal childhood maltreatment exposure: implications for fetal brain development. *Journal of the American Academy of Child and Adolescent Psychiatry*, 2017; 56(5):373-82. Impact Factor: 7.18.
- J77. Ikenoue S, Waffan F, Ohashi M, Sumiyoshi K, Ikenoue C, Buss C, Gillen DL, Simhan HN, Entringer S, Wadhwa PD. Prospective association of fetal liver blood flow at 30 weeks gestation with newborn adiposity. *Am J Obstet Gynecol*, 2017; 17:30523-9. Impact Factor: 4.68.
- J78. Miller GE, Culhane JF, Grobman W, Simhan HN, Williamson DF, Adam EK, Buss C, Entringer S, Kim KY, Garcia-Espana F, Keenan-Devlin L, McDade TW, Wadhwa PD, Borders AE. Mother's Childhood Hardship Forecasts Adverse Pregnancy Outcomes: Role of Inflammatory, Lifestyle and Psychosocial Pathways. *Brain, Behavior and Immunity*, 2017; 17:30128-9. Impact Factor: 5.87.
- J79. Moog NK, Heim CM, Entringer S, Kathmann N, Wadhwa PD, Buss C. Exposure to Childhood Maltreatment is Associated with Increased Risk of Subclinical Hypothyroidism in Pregnancy. *Psychoneuroendocrinology*, 2017; 84:190-196. Impact-Factor: 4.94
- J80. Ikenoue S, Waffarn F, Sumiyoshi K, Ohashi M, Ikenoue C, Buss C, Gillen DL, Simhan HN,



- Entringer S, Wadhwa PD. Association of Ultrasound-based Measures of Fetal Body Composition with Newborn Adiposity. *Pediatric Obesity*, 2016, [Epub ahead of print]. Impact-Factor: 3.69
- J81. Rasmussen J, Entringer S, Kruggel F, Cooper D, Styner M, Gilmore JH, Potkin S, Wadhwa PD, Buss C. Newborn Insula Gray Matter Volume is Prospectively Associated With Early Life Adiposity Gain. *International Journal of Obesity*. [Epub ahead of print]. Impact Factor: 5.34.
- J82. Graham AM, Rasmussen JM, Rudolph MD, Demeter DV, Heim CM, Gilmore JH, Styner M, Entringer S, Wadhwa PD, Fair DA, Buss C. Maternal Systemic Interleukin-6 During Pregnancy is Associated with Newborn Amygdala Phenotypes and Subsequent Behavior at 2-years-of-age. *Biological Psychiatry*. [Epub ahead of print]. Impact-Factor: 11.21
- J83. Entringer S, Rasmussen J, Cooper DM, Ikenoue S, Waffarn F, Potkin, SG, Wadhwa PD, Buss C. Association between supraclavicular brown adipose tissue composition at birth and adiposity gain from birth to 6 months age. *Pediatric Research*. [Epub ahead of print]. Impact-Factor: 2.76
- J84. Moog KL, Entringer S, Rasmussen JM, Styner M, Gilmore KH, Kathmann M, Heim CM, Wadhwa PD, Buss C. Intergenerational effect of maternal exposure to childhood trauma on newborn brain anatomy. *Biological Psychiatry*. [Epub ahead of print]. Impact-Factor: 11.21
- J85. Girchenko P, Lahti M, Tuovinen S, Savolainen J, Lahti J, Binder E, Reynolds R, Entringer S, Buss C, Wadhwa PD, Hämäläinen E, Kajantie E, Pesonen AK, Villa PM, PREDO Study group, Laivuori H, Räikkönen K. Prediction and Prevention of Preeclampsia and Intrauterine Growth Restriction (PREDO) Study. *International Journal of Epidemiology*. [Epub ahead of print]. Impact-Factor: 9.18
- J86. Kim DJ, Davis EP, Sandman CA, Sporns O, O'Donnell BF, Buss C, Hetrick WP. Prenatal Maternal Cortisol Has Sex-Specific Associations with Child Brain Network Properties, *Cerebral Cortex*, 2016 [Epub ahead of print]. Impact-Factor: 8.29
- J87. Entringer S, de Punder K, Buss C, Wadhwa PD. The Fetal Programming of Telomere Biology Hypothesis: An Update. *Philosophical Transactions of the Royal Society B*. [Epub ahead of print]. Impact-Factor: 5.85
- J88. Kominiarek MA, Grobman W, Adam E, Buss C, Culhane J, Entringer S, Miller G, Simhan H, Wadhwa PD, Williamson D, Kim K-Y, Keenan-Devlin L, Borders A. Prenatal stress and gestational weight gain. *Am J Obstet Gynecol*, (in press). Impact-Factor: 5.23

### **Manuscripts, under review or in preparation**

1. Overfeld J, Entringer S, Rasmussen JM, Gilmore JH, Styner M, Heim CM, Wadhwa PD, Buss C. Neonatal Hippocampal Volume as a Differential Susceptibility Factor Modulating the Effects of Early Postnatal Enrichment on Cognitive Development. *Neuropsychopharmacology*.
2. Rasmussen JM, Graham AM, Rudolph MD, Demeter DV, Heim CM, Gilmore JH, Styner M, Entringer S, Wadhwa PD, Fair DA, Buss C. Maternal Systemic Interleukin-6 During Pregnancy is Associated with Uncinate Fasciculus Development and Cognitive Development During the First Year of Life. *Neuroimage*.
3. Toepfer P, O'Donnell KJ, Heim CM, Lin DTS, MacIsaac JL, Kobor MS, Meaney MJ, Provencal N, Binder EB, Entringer S, Wadhwa PD, Buss C. Dynamic DNA methylation changes in the oxytocin

locus (OXT) during pregnancy are associated with maternal parenting behavior. *Neuropsychopharmacology*.

4. Lindsay KL, Entringer S, Buss C, Wadhwa PD. Intergenerational transmission of the effects of maternal childhood trauma exposure on offspring obesity risk: a fetal programming perspective. *Obesity Reviews*.
5. Miller ES, Grobman WA, Culhane JF, Adam E, Buss C, Entringer S, Miller G, Simhan HN, Wadhwa PD, Williamson D, Kim K-K, Borders A. Antenatal depression/anxiety, psychotropic medication use and inflammation among pregnant women. *Am J Obstet Gynecol*.
6. Hellmuth C, Lindsay KL, Uhl O, Buss C, Wadhwa PD, Koletzko B, Entringer S. Maternal metabolomic profile and fetal programming of offspring adiposity: new insights from a longitudinal prospective cohort study. *Diabetes*.
7. Rudolph MD, Graham AM, Rasmussen JM, Nardos R, Entringer S, Wadhwa PD, Buss C, Fair DA. Maternal IL-6 during pregnancy can be estimated from the newborn brain connectome and predicts future working memory performance in offspring. *Nature Neurosci*.
8. Rasmussen JM, Buss C, Entringer S, Wadhwa PD. Fetal Programming of Human Energy Homeostasis Brain Networks: Issues and Considerations. *JAMA Pediatrics*.

### Published Abstracts, peer-reviewed

1. Buss C, Wadiwalla M, Hellhammer DH, Meaney MJ, Lupien SJ, Pruessner JC. The Impact of Fetal Growth on the Adrenocortical Stress Response is Gender-specific. *Early Human Development*, 2006; 82 (8):533-533.
2. Buss C, Wadiwalla M, Hellhammer DH, Meaney MJ, Pruessner JC, Lupien SJ. Early Adversity Affects Glucocorticoid Memory Modulation. *Journal of Psychophysiology*, 2006; 20(2):109-109.
3. Pruessner JC, Buss C, Mahani NK, Lupien SJ, Meaney MJ. Deactivation of the Limbic System during Perception of Psychosocial Stress: Evidence from PET and fMRI Studies. *Journal of Psychophysiology*, 2006; 20(2):109-110.
4. Buss C, Floro JN, Andersen J, Mavandadi S, Wadhwa PD. Impact of Maternal Psychosocial Stress on Birth Outcomes: a Meta-analysis. *Early Human Development*, 2007; 83:173-174.
5. Buss C, Class QA, Tan ET, Gierczak M, Patillo C, Sandman CA. Fetal Heart Rate Responses over Pregnancy Predict Infant Mental and Motor Development During the First Year of Life. *Early Human Development*, 2007; 83:114-115.
6. Buss C, Wadiwalla M, Mahani NK, Scherling C, Meaney MJ, Lupien SJ, Pruessner JC. Early Adversity as a Determinant of Successful Aging. *Biological Psychiatry*, 2007; 61(8):103S-103S.
7. Wadiwalla M, Buss C, Pruessner JC. The Dorsolateral Prefrontal Cortex (DLPFC) - A Structural Correlate of Self Esteem? *Biological Psychiatry*, 2007; 61(8):220S-220S.
8. Buss C, Entringer S, Cammack AL, Reyes JF, Chicz-Demet A, Sandman CA, Wadhwa PD. Attenuation of the Cortisol Awakening Response (CAR) over the Course of Human Gestation is Associated with Gestational Age at Birth. *American Journal of Obstetrics & Gynecology*, 2008; 199 (6):S23.

9. Duchesne A, Mahani NK, Buss C, Wadiwalla M, Dedovic K, Pruessner JC. Gender Differences in Neural Activation Changes during Psychosocial Stress. *International Journal of Neuropsychopharmacology*, 2008; 100-100.
10. Entringer S, Buss C, Andersen J, Chicz-Demet A, Sandman CA, Wadhwa PD. Repeated Ambulatory Assessments of Maternal Cortisol over a Multiple-day Period Predict Length of Gestation and Birth Weight. *American Journal of Obstetrics & Gynecology*, 2008; 199(6):S56.
11. Entringer S, Buss C, Chicz-Demet A, Sandman CA, Wadhwa PD, Hobel CJ. Homeostatic Implications for a Relationship between Placental Corticotrophin-releasing hormone (PCRH) and Umbilical Artery Blood Flow in Human Pregnancy. *American Journal of Obstetrics & Gynecology*, 2009; 201(6):S117.
12. Buss C, Davis EP, Class Q, Crippen C, Canino C, Gierczak M, Holliday C, Sandman CA. Fetal Heart Rate Responses over Pregnancy Predict Infant Mental and Motor Development during the First Year of Life. *Infant Mental Health Journal*, 2010; 32(3):S279.
13. Buss C, Davis EP, Entringer S, Wadhwa PD, Sandman CA. The impact of Maternal Prenatal Pregnancy-specific Anxiety on Infant and Child Neurodevelopmental Outcomes. *Longitudinal and Life Course Studies*, 2010; 1(3), Supplement.
14. Buss C, Davis EP, Pruessner JC, Muftuler T, Head K, Hasso A, Hobel CJ, Sandman CA. Increased Risk for Affective Disorders Programmed *In Utero*? High Prenatal Maternal Cortisol and Volumes of the Amygdala and Hippocampus in the Offspring At 6-9 Years. *Biological Psychiatry*, 2011; 69(9):S110.
15. Buss C, Davis EP, Pruessner JC, Muftuler T, Head K, Hasso A, Hobel CJ, Sandman CA. Increased Risk for Affective Disorders Programmed *In Utero*? High Prenatal Maternal Cortisol and Volumes of the Amygdala and Hippocampus in the Offspring At 6-9 Years. *Journal of Developmental Origins of Health and Disease*, 2011; 2:S37.
16. Entringer S, De Haene J, Buss C, Mathew L, Stotland N, Havel P, Wadhwa PD, Culhane J, King J. Pre-pregnancy BMI, but not weight gain during pregnancy, is associated with maternal systemic inflammation during pregnancy in two independent cohorts. *Diabetes*, 2011;60 (Supplement 1):A118.
17. Davis EP, Buss C, Muftuler L, Wing DA, Head K. Prenatal Glucocorticoid Treatment Influences Human Brain Development. *Journal of Developmental Origins of Health and Disease*, 2011; 2:S52.
18. Entringer S, Buss C, Davis E, Wadhwa PD, Sandman CA. Maternal Pre-pregnancy Body Mass Index is Associated with ADHD Symptoms and Impaired Inhibitory Control in 6-9 year Old Children. *Neuropsychopharmacology*, 2011, 36:S237.
19. Sumiyoshi K, De Haene J, Buss C, Waffarn F, Sameshima H, Wadhwa PD, Entringer S. Human Fetal Body Composition: Effects of Protective Maternal Dietary Factors. *Ultrasound in Obstetrics & Gynecology*, 2012, 40 (S1), 288-288.
20. Buss C, Entringer S, Davis EP, Hobel CJ, Swanson JM, Wadhwa PD, Sandman CA. Maternal Pre-pregnancy Obesity and Child ADHD symptoms, Executive Function and Cortical Thickness. *European Journal of Psychotraumatology Supplement 1*, 2012, 3: 19554 - <http://dx.doi.org/10.3402/ejpt.v3i0.19554>
21. Entringer S, Epel ES, Lin J, Buss C, Blackburn EH, Simhan HN, Wadhwa PD. Prenatal Programming of Newborn and Infant Telomere Length. *European Journal of Psychotraumatology Supplement 1*, 2012, 3: 19554 - <http://dx.doi.org/10.3402/ejpt.v3i0.19554>

22. Moog N, Buss C, Entringer S, Sandman CA, Wadhwa PD. Exposure to Childhood Trauma among Pregnant Women Is Associated with Increased Placental CRH Production over Gestation. *European Journal of Psychotraumatology Supplement 1*, 2012, **3**: 19554 - <http://dx.doi.org/10.3402/ejpt.v3i0.19554>
23. Buss C, Pruessner JC, Mayberg H, Mletzko T, Nemeroff C, Heim CM. Larger Amygdala Volumes after Childhood Trauma Associated with Depression and Cortisol Response to Psychosocial Stress in Adulthood. *European Journal of Psychotraumatology Supplement 1*, 2012, **3**: 19554 - <http://dx.doi.org/10.3402/ejpt.v3i0.19554>
24. Entringer S, Buss C, Wadhwa PD. Maternal Cortisol Concentrations during Pregnancy and Infant Adiposity. *Psychoneuroendocrinology* 2015; 61:13.
25. Buss C, Graham AM, Rasmussen J, Entringer S, Gilmore JH, Styner M, Wadhwa PD, Fair DA. Lack of maternal stress dampening during pregnancy is associated with altered neonatal amygdala connectivity. *Psychoneuroendocrinology* 2015; 61:11-2.
26. Overfeld J, Entringer S, Rasmussen J, Consing KN, Gilmore JH, Styner M, Heim CM, Wadhwa PD, Buss C. Neonatal amygdala volume modulates the effects of the early caregiving environment on infant social development. *Psychoneuroendocrinology* 2015; 61:34-5.
27. Buss C, Entringer S, Wadhwa PD, Adam E, Culhane J, Grobman W, Kim KY, Mathew L, Simhan H, Williamson D, Borders A. Maternal childhood trauma and cortisol during pregnancy. *American Journal of Obstetrics & Gynecology* 214:1 (350-351), January 2016.
28. Buss C, Stalder T, Entringer S, Wadhwa PD. Maternal preconceptional and gestational stress, hair cortisol concentrations during pregnancy and newborn brain integrity. *Psychoneuroendocrinology* 71:72-73, September 2016.
29. Toepfer P, Heim C, Entringer S, Buss C. A variation in the oxytocin receptor gene moderates the relationship between early maternal care in childhood and interleukin 6 (IL-6) concentrations during pregnancy. *Psychoneuroendocrinology* 71:15, September 2016.
30. Moog N, Heim C, Entringer S, Buss C. Exposure to childhood trauma is associated with increased risk for subclinical hypothyroidism in pregnancy. *Psychoneuroendocrinology* 71:59-60, September 2016.
31. Buss C, Moog N, Entringer S, Wadhwa PD. Brain structural alterations in newborns of mothers exposed to childhood trauma. *Psychoneuroendocrinology* 71:3, September 2016.
32. Entringer S, Epel E, Lin J, Buss C, Blackburn E, Simhan H, Räikkönen K, Wadhwa PD. Telomere biology as a mechanism in developmental programming of health and disease risk. *Psychoneuroendocrinology* 71:4, September 2016.
33. Miller ES, Grobman WA, Culhane J, Adam E, Buss C, Entringer S, Miller G, Simhan H, Wadhwa PD, Williamson D, Kim KY, Borders A. Do psychotropic medications reduce inflammation in women with antenatal depression/anxiety? *American Journal of Obstetrics & Gynecology* 216:1 (403-404), January 2017.
34. Entringer S, Borders A, Buss C, Culhane J, Miller G, Grobman W, Simhan H, Adam E, Williamson D, Kim KY, Keenan-Devlin L, Wadhwa PD. Economic hardship during childhood is associated with immune hyperresponsiveness during pregnancy. *American Journal of Obstetrics & Gynecology* 216:1 (366), January 2017.

35. Miller ES, Grobman WA, Culhane J, Adam E, Buss C, Entringer S, Miller G, Simhan H, Wadhwa PD, Williamson D, Kim KY, Borders A. Does maternal inflammation mediate the relationship between antenatal depression and adverse pregnancy outcomes? *American Journal of Obstetrics & Gynecology* 216:1 (404), January 2017.
36. Borders A, Keenan-Devlin L, Adam E, Miller G, Culhane J, Wadhwa PD, Buss C, Entringer S, Kuchta K, Kim KY, Simhan H, Williamson D, Grobman W. Maternal childhood disadvantage, hair cortisol, and small-for-gestational-age birth. *American Journal of Obstetrics & Gynecology* 216:1 (219), January 2017.
37. Lindsay K, Hellmuth C, Uhl O, Buss C, Wadhwa PD, Koletzko B, Entringer S. Identification of metabolomic profiles that confer intergenerational transfer of obesity risk. *American Journal of Obstetrics & Gynecology* 216:1 (298-299), January 2017.
38. Lindsay K, Hellmuth C, Uhl O, Buss C, Wadhwa PD, Koletzko B, Entringer S. Prenatal interleukin-6 influences maternal amino acid profiles with implications for fetal programming of obesity. *American Journal of Obstetrics & Gynecology* 216:1 (299), January 2017.
39. Buss C, Borders A, Entringer S, Culhane J, Miller G, Grobman W, Adam E, Simhan H, Williamson D, Kim KY, Keenan-Devlin L, Wadhwa PD. Maternal childhood trauma is associated with a pro-inflammatory state during pregnancy. *American Journal of Obstetrics & Gynecology* 216:1 (291), January 2017.
40. Chen H, Budin F, Noel J, Prieto JC, Gilmore JH, Rasmussen JM, Wadhwa PD, Entringer S, Buss C, Styner M. White Matter Fiber-based Analysis of T1w/T2w Ratio Map. *SPIE Medical Imaging* 101330P-101330P-7, February 2017.
41. Kominiarek MA, Grobman W, Adam E, Buss C, Culhane J, Entringer S, Miller G, Simhan H, Wadhwa PD, Williamson D, Kim KY, Keenan-Devlin L, Borders A. Prenatal Stress and Gestational Weight Gain. *Reproductive Sciences* 24:125, March 2017.
42. Kaminsky Z, Jones I, Bakker A, Wadhwa PD, Entringer S, Osborne L, Binder EB, Frokjaer V, Buss C, Payne J. Discovery, Replication, and Application of an Epigenetic Biomarker Model to the Prediction of Postpartum Depression and Neuroimaging Endophenotypes. *Biological Psychiatry* 81:10, May 2017.
43. Thomas E, Graham A, Rudolph M, Rasmussen JM, Wadhwa PD, Entringer S, Gilmore JH, Styner M, Buss C, Fair DA. Implications of Newborn Amygdala Connectivity on Fear Vs. Negative Emotionality Development over the First Year of Life. *Biological Psychiatry* 81:10, May 2017.
44. Graham A, Rasmussen JR, Entringer S, Rudolph M, Styner M, Gilmore JH, Potkin S, Wadhwa PD, Fair A, Buss C. Sex specific effects of maternal cortisol concentrations during pregnancy on the functional connectivity of the newborn limbic system. *Psychoneuroendocrinology* 83:6, September 2017.
45. Toepfer P, O'Donnell KJ, Heim CM, Lin DTS, MacIsaac JL, Kobor MS, Meaney MJ, Provencal N, Binder EB, Entringer S, Wadhwa PD, Buss C. Dynamic DNA methylation changes in the oxytocin locus (OXT) during pregnancy are associated with maternal parenting behavior. *Psychoneuroendocrinology* 83:25, September 2017.
46. Lazarides C, Epel ES, Lin J, Blackburn EH, Buss C, Simhan HN, Wadhwa PD, Entringer S. Prospective association between maternal pro-inflammatory state during pregnancy and newborn telomere length. *Psychoneuroendocrinology* 83:27, September 2017.

47. Scholaske L, Buss C, Brose A, Wadhwa PD, Entringer S. Acculturation is associated with interleukin-6 concentrations among Hispanic pregnant women. *Psychoneuroendocrinology* 83:27, September 2017.
48. Rasmussen JM, Entringer S, Styner M, Gilmore JH, Graham A, Fair DA, Potkin SG, Wadhwa PD, Buss C. Maternal cortisol during gestation and sex specific prenatal programming of stress brain circuitry examined using diffusion tensor imaging. *Psychoneuroendocrinology* 83:6-7, September 2017.
49. Moog NK, Entringer S, Styner M, O'Donnell KJ, Gilmore JH, Meaney MJ, Binder EB, Heim CM, Wadhwa PD, Buss C. Interaction between maternal cortisol in pregnancy and infant FKBP5 genotype on newborn hippocampal volume and infant stress reactivity at 12 months. *Psychoneuroendocrinology* 83:26, September 2017.

## INVITED PRESENTATIONS

1. *Prenatal Programming of Human Brain Development*. Grand Rounds Department of Psychiatry and Human Behavior, University of California, Irvine, USA, December 2009.
2. *Impact of Prenatal Factors on Cognitive Development*. Invited presentation at the University of Bonn, Germany, February 2011.
3. *Prenatal Programming of Susceptibility for Mental Disorders*. Invited lecture at For OC Kids Neurodevelopmental Center, Orange, CA, July 2011.
4. *Developmental Programming of Health and Disease*. Orange County Health Care Agency, Santa Ana, CA, July 2011.
5. *Fetal Programming of Newborn and Infant Brain Development and Obesity Risk*. Grand Rounds Department of Epidemiology, University of California, Irvine, USA, July 2011.
6. *Prenatal Programming of Neurocognitive Development*. Invited presentation at the Charité, Berlin, Germany, February 2012.
7. *Early Life Origins of Psychopathology Susceptibility*. Invited lecture at the McGill Centre for Studies in Aging, McGill University, Montreal, Canada, March 2012.
8. *Fetal Programming of Neurocognitive Development - Considering the role of intrauterine stress and stress biology in programming susceptibility for psychopathology*. Invited speaker at the European Society for Pediatric Endocrinology, Crete, Greece, May 2012.
9. *Fetal Programming of Brain Development - Role of Intrauterine Stress and Stress Biology in Susceptibility for Psychopathology*. Invited lecture at the Laboratory for Experimental Fetal Maternal Medicine at the University of Hamburg Eppendorf, Hamburg, Germany, August 2012.
10. *Fetal Programming of Brain Development - Role of Intrauterine Stress and Stress Biology in Susceptibility for Psychopathology*. Grand rounds at the Department of Psychiatry and Psychotherapy at the Charité Campus Mitte, Berlin, Germany, February 2013.
11. *Prenatal Programming of Susceptibility for Psychiatric Disorders*. Psychiatry Platform in the context of the Berlin Institute of Health (BIH), Berlin, Germany, June 2013.

12. *Fetal Programming of Brain Development - Role of Intrauterine Stress and Stress Biology in Susceptibility to Psychopathology*. Endocrine Society, San Francisco, CA, USA, June 2013.
13. *Fetal Programming of Brain Development - Role of Intrauterine Stress and Stress Biology in Susceptibility to Psychopathology*. University of Edinburgh, UK, January 2014.
14. *Prenatal Endocrine and Immune Stress Biology and Newborn Brain Maturity*. NIMH Workshop: Pushing Translational Boundaries: Advances in Developmental Neuroimmunology & Mental Health. Bethesda, MD, USA, May 2014.
15. *Programming of Fetal Brain Development*. Neurocure Lunch Seminar Series, Charité, University Medicine, Berlin, Germany, June 2014.
16. *Early Life Stress and Neurodevelopment*. Northwestern University, Department of Medical Social Sciences, Chicago, IL, USA, August 2014.
17. *Fetal Programming of Brain Development - Role of Intrauterine Stress and Stress Biology in Susceptibility to Psychopathology*. Department of Clinical Science, University of Turku, September 2014.
18. *Early Life Stress and Brain Development – Implications for Cognitive Function and Mental Health*. Memory Symposium by the Gyllenberg Foundation “From neurobiological underpinnings to reminiscences in culture, Helsinki, Finland, September 2014.
19. *Fetal Programming of Neurodevelopment and Risk for Psychiatric Disorders – the Role of Intrauterine Stress and Stress Biology*. University of Helsinki, Finland, Institute of Behavioural Sciences, November 2014.
20. *Early Life Stress and Brain Development – Implications for Cognitive Function and Mental Health*. Leibniz Institute for Zoo and Wildlife Research, December 2014.
21. *Stress and Trauma during Early Life – Consequences for the Next Generation?* Urania, Berlin, May 2015.
22. *Fetal Programming of Neurodevelopment and Risk for Psychiatric Disorders – the Role of Intrauterine Stress and Stress Biology*. Department of Medical Genetics, University of British Columbia, Vancouver, BC, August 2015.
23. *Prenatal Programming of Brain Development*. Invited lecture at research colloquium for Master students. Department of Psychology, University of Zurich, Switzerland, September 2015.
24. *Early Origins of Psychiatric Disorders – How Stress Can Affect Brain Development*. SPZ-Symposium, Winterthur, Switzerland, November 2015.
25. *Prenatal Programming of Brain Development – Implications for Cognitive Function and Mental Health*. Universität Konstanz, January 2016.
26. *Developmental Programming of Brain Development - Implications for Mental Health and Disease*. Ruhr Universität Bochum, January 2016.
27. *Early Life Stress and Brain Development – Implications for Cognitive Function and Mental Health*. Max Planck Institute for Psychiatry, Munich, Germany, March 2016.
28. *Developmental Programming of Risk for Psychiatric Disorders*. The 7th biannual FENS-EMCCS

meeting, Copenhagen, Denmark, July 2016.

29. *Fetal Programming of Health and Disease – Underlying Biological Mechanisms and Targets for Intervention*. HCEO's Health Inequality Conference, Chicago, IL, USA, November 2016.
30. *Early Origins of Psychiatric Disorders – How the Prenatal Environment Can Affect Mental Health*. Tuesday-Colloquium of the University of Freiburg, Germany, January 2017.
31. *The Fetal Brain: Sensitive to a Mother's Own Childhood Environment?* First Annual UK Maternal Mental Health Alliance Conference, London, UK, September 2017.
32. *Fetal Programming of Brain Development – Role of Intrauterine Stress and Stress Biology for Psychopathology*. World Association of Stress-related and Anxiety Disorders, Würzburg, Germany, September 2017.

## PRESENTATIONS

### Conference Presentations, peer-reviewed (oral presentations)

1. Buss C, Lord C, Wadiwalla M, Hellhammer DH, Lupien SJ, Meaney MJ, Pruessner JC. Effects of Pre- and Postnatal Adversity on Hippocampal Volume in Healthy Adults: Accumulating Risk and Potential for Compensation. *International Society for Psychoneuroendocrinology*. Montreal, Canada, October 2005.
2. Buss C, Wadiwalla M, Hellhammer DH, Meaney MJ, Pruessner JC, Lupien SJ. Early Adversity Affects Glucocorticoid Memory Modulation. *DGPA*. Dresden, Germany, June 2006.
3. Buss C, Wadiwalla M, Khalili Mahani N, Scherling C, Meaney MJ, Lupien SJ, Pruessner JC. Early Adversity as a Determinant of Successful Aging. *Biological Psychiatry*. San Diego, CA, USA, May 2007.
4. Buss C, Entringer S, Wadhwa PD. Development, Health and Disease: a Biobehavioral Perspective. *The American Psychiatric Association*. San Diego, CA, USA, May 2007.
5. Buss C, Class Q, Tan ET, Gierczak M, Patillo C, Davis EP, Sandman CA. Fetal Heart Rate Responses across Pregnancy Predict Infant Mental and Psychomotor Development during the First Year of Life. *International Society for Developmental Psychobiology*. San Diego, CA, USA, November 2007.
6. Buss C, Entringer S, Cammack AL, Federenko IS, Reyes JF, Sandman CA, Wadhwa PD. Changes in the Cortisol Awakening Response during Pregnancy and Postpartum. *International Society for Psychoneuroendocrinology*. Dresden, Germany, July 2008.
7. Buss C, Entringer S, Reyes JF, Chicz-DeMet A, PhD, Waffarn F, Sandman CA, Wadhwa PD. Attenuation of the Cortisol Awakening Response (CAR) over the Course of Human Gestation is Associated with Gestational Age at Birth. *Society for Maternal Fetal Medicine*. San Diego, CA, USA, January 2009.
8. Buss C, Davis EP, Su L, Muftuler T, Head K, Sandman CA. Placental Corticotropin Releasing Hormone (CRH) Concentrations During Gestation and Structural Brain Differences in 6-9 year-old Children. *Winter Neuropeptide Conference*. Breckenridge, CO, USA, February 2009.
9. Buss C, Entringer S, Jonazary FR, Chicz-DeMet A, Sandman CA, Waffarn F, Wadhwa PD. Attenuation of the Cortisol Awakening Response (CAR) over the Course of Human Gestation is



- Associated with Gestational Age at Birth. *The American Psychosomatic Society*. Chicago, IL, USA, March 2009.
10. Buss C, Davis EP, Muftuler T, Head K, Sandman CA. High Pregnancy Anxiety during Mid-gestation is Associated with Decreased Gray Matter Density in 6-9 year-old Children. *International Society for Psychoneuroendocrinology*. San Francisco, CA, USA, July 2009.
  11. Buss C, Davis EP, Muftuler T, Head K, Sandman CA. High Pregnancy Anxiety During Mid-Gestation is Associated with Decreased Gray Matter Density in 6-9 year-old Children. *World Congress on the Developmental Origins of Health and Disease*. Santiago, Chile, November 2009.
  12. Buss C, Davis EP, Muftuler T, Head K, Sandman CA. Developmental Programming of Fetal and Infant Neurodevelopment. *Trends in Psychiatric Genetics and Neurobiology*. Breckenridge, CO, USA, March 2010.
  13. Buss C, Davis, EP, Entringer S, Wadhwa PD, Sandman CA. The Impact of Maternal Prenatal Pregnancy-specific Anxiety on Infant and Child Neurodevelopmental Outcomes. *Conference of Epidemiological Longitudinal Studies in Europe*. Paphos, Cyprus, October 2010.
  14. Buss C, Davis EP, Muftuler T, Head K, Sandman CA. The Impact of Maternal Prenatal Pregnancy-specific Anxiety on Infant and Child Neurodevelopmental Outcomes. *Gatlinburg Conference*. San Antonio, TX, USA, March 2011.
  15. Buss C, Davis EP, Muftuler T, Head K, Sandman CA. The Impact of Maternal Prenatal Pregnancy-specific Anxiety on Infant and Child Neurodevelopmental Outcomes. *Western Psychological Association*. Los Angeles, CA, USA. April 2011.
  16. Buss C, Davis EP, Pruessner JC, Muftuler T, Head K, Hasso A, Hobel CJ, Sandman CA. Increased Risk for Affective Disorders Programmed *In Utero*? High Prenatal Maternal Cortisol and Volumes of the Amygdala and Hippocampus in the Offspring At 6-9 Years. *Biological Psychiatry*. San Francisco, CA, USA, May 2011.
  17. Buss C, Davis EP, Pruessner JC, Muftuler T, Head K, Hasso A, Hobel CJ, Sandman CA. Increased Risk for Affective Disorders Programmed *In Utero*? High Prenatal Maternal Cortisol and Volumes of the Amygdala and Hippocampus in the Offspring At 6-9 Years. *International Society for Psychoneuroendocrinology*, Berlin, Germany, August 2011.
  18. Buss C, Entringer S, Davis EP, Sandman CA, Swanson JM, Wadhwa PD. Fetal Programming of Brain Development-Programming Susceptibility for Attention-Deficit-Hyperactivity Disorder? *Society of the Children and Adults with ADHD (CHADD) Society*, Orlando, FL, USA, November 2011.
  19. Buss C, Entringer S, Rasmussen J, Potkin S, Swanson JM, Wadhwa PD. Fetal Programming of Brown Adipose Tissue. *International Society for Psychopharmacology*, Waikoloa, HI, USA, December 2011.
  20. Buss C, Entringer S, Davis EP, Hobel CJ, Swanson JM, Wadhwa PD, Sandman CA. Maternal Pre-pregnancy Obesity and Child ADHD symptoms, Executive Function and Cortical Thickness. *International Society for Psychoneuroendocrinology*, New York City, NY, USA, September 2012.
  21. Buss C, Entringer S, Moog N, Heim C, Wadhwa PD. Prenatal Biological Pathways of Transgenerational Transmission of Early Life Stress. *International Society for Psychoneuroendocrinology*, Leiden, Holland, August 2013.

22. Buss C, Entringer S, Moog N, Heim C, Wadhwa PD. Prenatal Biological Pathways of Transgenerational Transmission of Early Life Stress. *Society of the Developmental Origins of Health and Disease*, Singapore, November 2013.
23. Buss C, Entringer S, Moog N, Gilmore JH, Styner M, Fair D, Wadhwa PD. Maternal Cortisol Concentrations during Pregnancy and Newborn Brain Connectivity. International Conference on Infant Studies. Berlin, Germany, July 2014.
24. Buss C, Entringer S, Moog N, Gilmore JH, Styner M, Wadhwa PD. Maternal Cortisol Concentrations during Pregnancy and Child Limbic Brain Structures. *International Society for Psychoneuroendocrinology*, Montreal, Canada, August 2014.
25. Buss C, Graham AM, Rudolph MD, Rasmussen J, Potkin SG, Entringer S, Wadhwa PD, Fair D. Maternal Interleukin-6 Concentrations during Pregnancy and Newborn Functional Brain Connectivity. *Society for Neuroscience*, Washington D.C., USA, November 2014.
26. Buss C, Graham AM, Rudolph MD, Rasmussen J, Potkin SG, Entringer S, Wadhwa PD, Fair D. Maternal Inflammation during Pregnancy and Newborn Functional Brain Connectivity - How the *in utero* Milieu May Impact Susceptibility for Psychopathology. *Society for Neuroscience Press Conference*, Washington D.C., USA, November 2014.
27. Buss C, Entringer S, Rasmussen J, Consing KZ, Gilmore JH, Styner M, Wadhwa PD. Newborn Limbic Structure Volumes Modulate Differential Susceptibility to the Postnatal Environment. *Society for Research in Child Development*, Philadelphia, PA, USA, March 2015.
28. Buss C, Graham AM, Rasmussen J, Entringer S, Gilmore JH, Styner M, Wadhwa PD, Fair DA. Lack of Maternal Stress Dampening during Pregnancy is Associated with Altered Neonatal Amygdala Connectivity. *International Society for Psychoneuroendocrinology*, Edinburgh, Scotland, September 2015.
29. Buss C/Entringer S, Wadhwa PD. Prenatal Stress, Development, Health and Disease Risk: a Psychobiological Perspective. *International Society for Psychoneuroendocrinology*, Edinburgh, Scotland, September 2015.
30. Buss C, Entringer E, Moog N, Gilmore JH, Styner M, Graham A, Fair D, Wadhwa PD. Maternal Cortisol Concentrations during Pregnancy and Newborn Brain Integrity. *Nordic Psychiatric Congress*, Copenhagen, Denmark, September 2015.
31. Buss C. Pränatale Programmierung der Gehirnentwicklung – Implikationen für Kognitive Leistungsfähigkeit und Mentale Gesundheit. *Deutscher Kongress für Psychosomatische Medizin und Psychotherapie*, Potsdam, Germany, March 2016.
32. Buss C, Moog NK, Entringer S, Rasmusen JR, Styner MA, Gilmore JH, Heim CM, Wadhwa PD. Brain structural alterations in newborns of mothers exposed to childhood trauma. *International Society for Psychoneuroendocrinology*, Miami, FL, USA, September 2016.
33. Buss C. Intrauterine Mechanismen der intergenerationalen Transmission mütterlichen Kindheitstraumas. *Annual meeting of the DGKJ, DGSPJ, DGKCH, des BeKD und der GPGE*, Hamburg, Germany, September 2016.
34. Buss C. Fetale Programmierung der Gehirnentwicklung und des Risikos für Psychiatrische Erkrankungen. *Annual meeting of the DGMP und DGMS*, Berlin, Germany, September 2016.

35. Buss C, Moog NK, Entringer S, Rasmusen JR, Styner MA, Gilmore JH, Heim CM, Wadhwa PD. Brain structural alterations in newborns of mothers exposed to childhood trauma. *7th World Congress on Women's Mental Health*, Dublin, Ireland, March 2017.
36. Buss C, Moog NK, Entringer S, Rasmusen JR, Styner MA, Gilmore JH, Heim CM, Wadhwa PD. Brain structural alterations in newborns of mothers exposed to childhood trauma. *43rd Psychologie und Gehirn (PuG) Conference*, Trier, Germany, June 2017.

#### Conference Presentations, peer-reviewed (poster presentations)

1. Buss C, Wolf OT, Witt J, Hellhammer DH. Effects of Hydrocortisone Administration on Autobiographic Memory. *International Society for Psychoneuroendocrinology*. Pisa, Italy, March 2003.
2. Buss C, Schuelter U, Hesse J, Moser D, Phillips DI, Hellhammer DH, Meyer J. Simon's Fatigue. *International Society for Psychoneuroendocrinology*. New York City, NY, USA, September 2003.
3. Buss C, Wadiwalla M, Hellhammer DH, Meaney MJ, Pruessner JC, Lupien SJ. Effects of Size for Gestational Age and Early Maternal Care on BMI in Healthy University Students. *International Society for Psychoneuroendocrinology*. Glasgow, UK, July 2004.
4. Buss C, Wadiwalla M, Khalili Mahani N, Scherling C, Meaney MJ, Lupien SJ, Pruessner JC. Early Adversity as a Determinant of Successful Aging. *International Society for Psychoneuroendocrinology*. Leiden, Holland, August 2006.
5. Buss C, Lord C, Wadiwalla M, Hellhammer DH, Lupien SJ, Meaney MJ, Pruessner JC. Maternal Care Modulates the Relationship between Birth Weight and Hippocampal Volume. *The Lille Summerschool on Neuroplasticity over the Lifespan*. Lille, France, September 2006.
6. Buss C, Wadiwalla M, Hellhammer DH, Meaney MJ, Lupien SJ, Pruessner JC. The Impact of Fetal Growth on the Adrenocortical Stress Response is Gender Specific. *World Congress on the Developmental Origins of Health and Disease*. Utrecht, Holland, September 2006.
7. Buss C, Floro JN, Andersen J, Mavandadi S, Wadhwa PD. Impact of Maternal Psychosocial Stress on Birth Outcomes: A meta-analysis. *World Congress on the Developmental Origins of Health and Disease*. Perth, Australia, November 2007.
8. Buss C, Class QA, Tan ET, Gierczak M, Patillo C, Sandman CA. Fetal Heart Rate Responses over Pregnancy Predict Infant Mental and Motor Development during the First Year of Life. *World Congress on the Developmental Origins of Health and Disease*. Perth, Australia, November 2007.
9. Buss C, Davis EP, Glynn LM, Chicz-DeMet A, Hobel CJ, Sandman CA. Maternal Cortisol during Early and Mid Gestation Predicts Spatial Working Memory Performance in 5-8 year-old Children Born at Term. *International Society for Psychoneuroendocrinology*. Dresden, Germany, July 2008.
10. Buss C, Entringer S, Jonazary FR, Chicz-DeMet A, Sandman CA, Waffarn F, Wadhwa PD. Attenuation of the Cortisol Awakening Response (CAR) over the Course of Human Gestation is Associated with Gestational Age at Birth. *International Society for Psychoneuroendocrinology*. San Francisco, CA, USA, July 2009.
11. Buss C, Entringer S, Jonazary FR, Chicz-DeMet A, Sandman CA, Waffarn F, Wadhwa PD. Attenuation of the Cortisol Awakening Response (CAR) over the Course of Human Gestation is Associated with Gestational Age at Birth. *World Congress on the Developmental Origins of Health and Disease*. Santiago, Chile, November 2009.

12. Buss C, Davis EP, Class Q, Crippen C, Canino C, Gierczak M, Patillo C, Sandman CA. Fetal Heart Rate responses over Pregnancy Predict Infant Mental and Motor Development during the First Year of Life. *Word Congress on Infant Mental Health in Leipzig*. Germany, June 2010.
13. Buss C, Davis EP, Pruessner JC, Muftuler T, Head K, Hasso A, Hobel CJ, Sandman CA. Increased Risk for Affective Disorders Programmed In Utero? High Prenatal Maternal Cortisol and Volumes of the Amygdala and Hippocampus in the Offspring at 6-9 Years. *World Congress on the Developmental Origins of Health and Disease*. Portland, OR, USA, September 2011.

## EDITORIAL CONSULTANT

American Journal of Obstetrics and Gynecology  
 Archives of Women's Mental Health  
 Biological Psychiatry  
 Biological Psychology  
 British Journal of Psychiatry  
 Cerebral Cortex  
 Child Development  
 Cytokines  
 Developmental Psychobiology  
 Development and Psychopathology  
 European Child & Adolescent Psychiatry  
 Frontiers  
 Hormones and Behavior  
 Human Brain Mapping  
 Human Development  
 IEEE Transactions on Medical Imaging  
 International Journal of Psychopharmacology  
 International Journal of Obesity  
 JAMA Psychiatry  
 Journal of Clinical Endocrinology and Metabolism  
 Journal of Child Psychology and Psychiatry  
 Journal of Psychosomatic Obstetrics & Gynecology  
 Molecular Psychiatry  
 Neurobiology of Aging  
 Neuroimage  
 Pediatrics  
 Proceedings of the National Academy of Sciences of the United States of America  
 Psychological Medicine  
 Psychological Science  
 Psychoneuroendocrinology  
 Psychopharmacology  
 Stress

## **GRANT REVIEWS AND ADVISORY BOARDS**

---

Scientific Reviewer for the National Institutes of Health ([NIH], Child Psychopathology and Developmental Disorders [CPDD] study section)  
Scientific Reviewer for Institute for Clinical and Translational Science (ICTS), University of California, Irvine  
Scientific Reviewer for the Canadian Institute of Health Research (CIHR)  
Scientific Reviewer for the Fondation Privée HUG  
Scientific Reviewer for the National Medical Research Council Singapore  
Scientific Reviewer for the Netherlands Organization for Health Research and Development (ZonMw)  
Scientific Reviewer for the Université de Luxembourg  
Scientific Reviewer for The Netherlands Organization for Health Research and Development (ZonMw Vidi Program)  
Scientific Advisory Committee for the FinnBrain Birth Cohort Study in Turku, Finland

## **PROFESSIONAL SOCIETIES**

---

Academy of Behavioral Medicine Research  
German Society for Psychology  
German Society for Medical Psychology  
Developmental Origins of Health and Disease (DOHaD)  
Flux: The Society for Developmental Cognitive Neuroscience  
International Society for Psychoneuroendocrinology (ISPNE)  
Society for Biological Psychiatry (SBP)  
Society for Neuroscience (SfN)

## **LANGUAGE SKILLS**

---

German	native language
English	business fluent
French	basic knowledge