

## Brendan Dale Ostlund

Child Study Center  
Department of Psychology  
The Pennsylvania State University  
267 Moore Building  
University Park PA 16802  
bdo12@psu.edu

### EDUCATION AND TRAINING

|              |   |
|--------------|---|
| 2019-Present | Postdoctoral Scholar<br>Dept. of Psychology<br>The Pennsylvania State University<br>Advisor: Koralý Pérez-Edgar, Ph.D.                    |
| 2015-2019    | Ph.D. in Developmental Psychology<br>Dept. of Psychology<br>University of Utah<br>Advisor: Elisabeth Conradt, Ph.D.                       |
| 2013-2015    | M.S. in Developmental Psychology<br>Dept. of Psychology<br>University of Oregon<br>Advisors: Jeff Measelle, Ph.D. & Jennifer Ablow, Ph.D. |
| 2009-2013    | B.S., Psychology<br>University of Oregon  |

### PUBLICATIONS

1. **Ostlund, B.D.**, Myruski, S., Buss, K., & Pérez-Edgar, K.E. (*in press*). The centrality of temperament to the Research Domain Criteria (RDoC): The earliest building blocks of psychopathology. *Development and Psychopathology*.
2. **Ostlund, B.D.**, Pérez-Edgar, K.E., Shisler, S., Terrell, S., Godleski, S., Schuetze, P., & Eiden, R.D. (*in press*). Prenatal substance exposure and maternal hostility from pregnancy to toddlerhood: Associations with temperament at 16-months of age. *Development and Psychopathology*.
3. **Ostlund, B.**, Donoghue, T., Anaya, B., Gunther, K.E., Karalunas, S., Voytek, B., & Pérez-Edgar, K.E. (2021). Spectral parameterization for studying neurodevelopment: How and why. *PsyArXiv*. <https://doi.org/10.31234/osf.io/btqyk>
4. **Ostlund, B.D.**, Alperin, B., Drew, T., & Karalunas, S. (2021). Behavioral and cognitive correlates of the aperiodic (1/f-like) exponent of the EEG power spectrum in adolescents with and without ADHD. *Developmental Cognitive Neuroscience*, 48, 100931. <https://doi.org/10.1016/j.dcn.2021.100931>

5. Gao, M., **Ostlund, B.D.**, Brown, M.A., Kaliush, P., Terrell, S., Vlisides-Henry, R.D., Raby, L., Crowell, S.E., & Conradt, E. (2021). Prenatal maternal transdiagnostic, RDoC-informed, predictors of newborn neurobehavior: Differences by sex. *Development and Psychopathology*, 1-12. <https://doi.org/10.1017/S0954579420002266>
6. **Ostlund, B.D.**, Olavson, K., Brown, M.A., Shakiba, N., Saenz, C., Crowell, S.E., & Conradt, E. (2021). Maternal mindfulness during pregnancy predicts newborn neurobehavior. *Developmental Psychobiology*, 1-9. <https://doi.org/10.1002/dev.22131>
7. Pérez-Edgar, K., LoBue, V., Buss, K.A., Field, A.P., & **the LANts Team** (2021). Study Protocol: Longitudinal Attention and Temperament study (LANts). *Frontiers in Psychiatry*, 12, 656958. <https://doi.org/10.3389/fpsyt.2021.656958>
8. Conradt, E., Shakiba, N., **Ostlund, B.D.**, Terrell, S., Kaliush, P., Shakib, J., & Crowell, S.E. (2020). Prenatal hair cortisol concentrations are related to maternal prenatal emotion dysregulation but not newborn outcomes. *Developmental Psychobiology*, 62, 758-767. <https://doi.org/10.1002/dev.21952>
9. **Ostlund, B.D.**, Vlisides-Henry, R., Crowell, S.E., Raby, K.L., Terrell, S., Brown, M., Kaliash, P., Tinajero, R., Shakiba, N., Monk, C., Shakib, J., Buchi, K.F., & Conradt, E. (2019). Intergenerational transmission of emotion dysregulation Part II: Developmental origins of newborn neurobehavior. *Development and Psychopathology*, 31, 833-846. <https://doi.org/10.1017/S0954579419000440>
10. Conradt, E., **Ostlund, B.D.**, Geurin, D., Armstrong, D.A., Marsit, C.J., Tronick, E., LaGasse, L., & Lester, B.M. (2019). DNA methylation of NR3C1 in infancy: Associations between maternal caregiving and infant sex. *Infant Mental Health Journal*, 40, 513-522. <https://doi.org/10.1002/imhj.21789>
11. Lin, B.<sup>†</sup>, **Ostlund, B.D.**<sup>†</sup>, Conradt, E., LaGasse, L., & Lester, B.M. (2018). Testing the programming of temperament and psychopathology in two independent samples of children with prenatal substance exposure. *Development and Psychopathology*, 30, 1023-1040. <https://doi.org/10.1017/S0954579418000391>. <sup>†</sup> Denotes co-first authorship
12. Measelle, J.R. & **Ostlund, B.D.** (2018). Anxiety. In M.H. Bornstein (Eds.), *The SAGE Encyclopedia of Lifespan Development*. Thousand Oaks, CA: SAGE Publications.
13. David, J., Measelle, J.R., **Ostlund, B.D.**, & Ablow, J.C. (2017). Association between early life adversity and inflammation during infancy. *Developmental Psychobiology*, 59, 696-702. <https://doi.org/10.1002/dev.21538>
14. **Ostlund, B.D.**, Measelle, J.R., Laurent, H., Conradt, E., & Ablow, J.C. (2017). Shaping emotion regulation: Attunement, symptomatology, and stress recovery within mother-infant dyads. *Developmental Psychobiology*, 59, 15-25. <https://doi.org/10.1002/dev.21448>

15. **Ostlund, B.D.**, Conradt, E., Crowell, S.E., Tyrka, A.R., Marsit, C.J., & Lester, B.M. (2016). Prenatal stress, fearfulness, and the epigenome: Exploratory analysis of sex differences in DNA methylation of the glucocorticoid receptor gene. *Frontiers in Behavioral Neuroscience*, 10, 1-8. <https://doi.org/10.3389/fnbeh.2016.00147>

### **MANUSCRIPTS UNDER REVIEW**

1. Anaya, B., **Ostlund, B.D.**, LoBue, V., Buss, K., & Pérez-Edgar, K. (*invited revisions*). Establishing the psychometric properties of frontal asymmetry and delta-beta coupling from 8- to 18-months of age.
2. Karalunas, S., **Ostlund, B.D.**, Alperin, B.R., Figuracion, M., Gustafsson, H., Michiko Deming, E., Foti, D., Antovich, D., Nigg, J., & Sullivan, E. (*invited revisions*). Aperiodic exponent of the EEG power spectrum can be reliably measured in early development and predicts ADHD risk.
3. Gao, M., Speck, B., **Ostlund, B.D.**, Neff, D., Shakiba, N., Vlisides-Henry, R.D., Kaliush, P.R., Molina, N.C., Thomas, L., Raby, K.L., Conradt, E., & Crowell, S.E. (*under review*). Developmental foundations of physiological dynamics among mother-infant dyads: The role of newborn neurobehavior.

### **SYMPOSIUM PRESENTATIONS**

1. **Ostlund, B.D.**, Raby, K.L., Williams, L., Crowell, S.E., Conradt, E., & Drew, T. (2021, April 7-9). Linking prenatal maternal distress and infant neural noise to problem behavior in toddlerhood. In M. Camerota (Chair), *Prenatal distress and neurobehavior in infancy and early childhood: Testing putative biological mechanisms* [Symposium]. Society for Research in Child Development (SRCD) Biennial Meeting, Minneapolis, MN, United States.  
*\*Presented virtually due to COVID-19*
2. Perez-Edgar, K., Anaya, B., **Ostlund, B.D.**, Buss, K., & LoBue, V. (2020, December). *Neural noise at 8-months predicts infant internalizing and externalizing behavior*. Paper presented at the annual meeting of the American College of Neuropsychopharmacology.  
*\*Presented virtually due to COVID-19*
3. Vlisides-Henry, R.D., Kaliush, P.R., Crowell, S.E., **Ostlund, B.D.**, Brown, M.A., Shakiba, N., Terrell, S., Smid, M.C., & Conradt, E. (2019, November). *Maternal prenatal anxious behavior predicts newborn outcomes: Implications for maternal and neonatal health care*. Paper presented as part of a symposium for the annual meeting of the Association of Behavioral and Cognitive Therapies; Atlanta, GA.
4. Brown, M.A., Terrell, S., **Ostlund, B.D.**, Crowell, S.E., & Conradt, E. (2019, March). *Intergenerational transmission baseline RSA: The role of maternal emotion dysregulation*. Paper presented as part of a symposium for the biennial meeting for the Society for Research in Child Development; Baltimore, MD.

5. Shakiba, N., Brown, M.A., Terrell, S., **Ostlund, B.D.**, Crowell, S.E., & Conradt, E. (2019, March). *Prospective prenatal predictors of maternal sensitivity*. Paper presented as part of a symposium for the biennial meeting for the Society for Research in Child Development; Baltimore, MD.
6. **Ostlund, B.D.**, Vlisides-Henry, R., Crowell, S.E., Raby, K.L., Terrell, S., Brown, M., Tinajero, R., Shakiba, N., Monk, C., Buchi, K.F., & Conradt, E. (2018, October). *Intergenerational transmission of emotion dysregulation Part II: Developmental origins of newborn neurobehavioral risk for psychopathology*. Paper presented as part of a perinatal preconference at the annual meeting of the International Society on Developmental Psychobiology; San Diego, CA.
7. **Ostlund, B.D.**, Williams, L.H., Conradt, E., Payne, B., Crowell, S.E., & Drew, T. (2018, July). *The adaptive influence of pregnancy-specific anxiety on infant neurophysiology*. Paper presented at the annual meeting of the Cognitive Science Association for Interdisciplinary Learning; Hood River, OR.
8. **Ostlund, B.D.**, Lin, B., Conradt, E., & Lester, B. (2018, July). *Temperament profiles among infants with prenatal substance exposure: Neonatal origins and implications for neurobehavioral development*. Paper presented as part of a paper symposium at the biennial meeting of the International Congress of Infant Studies; Philadelphia, PA.
9. Caron, Z., **Ostlund, B.D.**, Brown, M.A., Terrell, S., Crowell, S.E., & Conradt, E. (2018, July). *The combined effects of prenatal exposure to maternal stress physiology and acute stress on newborn neurobehavior*. Paper presented as part of a symposium at the biennial meeting for the International Congress of Infant Studies; Philadelphia, PA.
10. **Ostlund, B.D.**, Williams, L., Conradt, E., & Drew, T. (2017, April). *Allocating attention to threat: Pupil dilation and fearfulness in infancy*. Paper presented as part of a paper symposium at the biennial meeting of the Society for Research in Child Development; Austin, TX.
11. **Ostlund, B.D.**, Conradt, E., Crowell, S., Tyrka, A.R., Marsit, C.J., & Lester, B. (2017, April). *Prenatal stress, fearfulness, and the epigenome: Sex differences in DNA methylation of the glucocorticoid receptor gene*. Paper presented as part of a paper symposium at the biennial meeting of the Society for Research in Child Development; Austin, TX.

## **POSTER PRESENTATIONS**

1. **Ostlund, B.D.**, Anaya, B., LoBue, V., Buss, K., & Pérez-Edgar, K.E. (2020, September). *Charting trajectories of neural noise across the first two years of life*. Poster presented at the Flux Society annual meeting.  
\*Presented virtually due to COVID-19

2. **Ostlund, B.D.**, Burris, J.L., Anaya, B., LoBue, V., Buss, K.A., & Pérez-Edgar, K.E. (2020, July). *Neural noise associates with vigilance to threat in the first year of life*. Poster presented at the biennial meeting of the International Congress on Infant Studies; Glasgow, Scotland.  
\*Presented virtually due to COVID-19
3. Kaliush, P.R., Brown, M., Crowell, S.E., Tinajero, R., Raby, K.L., Williams, P.G., **Ostlund, B.D.**, Terrell, S., Neff, D., & Conradt, E. (2020, July). *Prenatal predictors of infant and maternal sleep*. Poster to be presented at the International Congress of Infant Studies; Glasgow, Scotland.  
\*Presented virtually due to COVID-19
4. Vlisides-Henry, R.D., Crowell, S.E., Butner, J., Terrell, S., Neff, D., Shakiba, N., **Ostlund, B.D.**, & Conradt, E. (2020, July). *Intrapersonal dynamics: Physiological-behavioral coordination as a marker of prenatal emotion dysregulation*. Poster to be presented at the International Congress of Infant Studies Biennial Meeting; Glasgow, Scotland.  
\*Presented virtually due to COVID-19
5. **Ostlund, B.D.**, Alonso, D., Williams, L., Crowell, S.E., Conradt, E., & Drew, T. (2019, March). *Developmental origins and temperamental correlates of neural reactivity to novelty among 7-month-olds: An ERP study*. Poster presented at the biennial meeting for the Society for Research in Child Development; Baltimore, MD.
6. Terrell, S., Conradt, E., **Ostlund, B.D.**, LaGasse, L., & Lester, B. (2019, March). *The development of callous-unemotional traits: Violence exposure and cortisol reactivity*. Poster presented at the biennial meeting for the Society for Research in Child Development; Baltimore, MD.
7. Kaliush, P., **Ostlund, B.D.**, Terrell, S., Brown, M.A., Conradt, E., & Crowell, S.E. (2019, March). *Maternal childhood maltreatment experiences and emotion dysregulation predict newborn neurobehavioral outcomes*. Poster presented at the Society for Research in Child Development; Baltimore, MD.
8. Neff, D., Brown, M.A., Terrell, S., **Ostlund, B.D.**, Kaliush, P., Vlisides, R.D., Crowell, S.E., & Conradt, E. (2019, March). *Prenatal programming of the infant sympathetic nervous system*. Poster presented at the Society for Research in Child Development; Baltimore, MD.
9. Vlisides-Henry, R.D., **Ostlund, B.D.**, Terrell, S., Brown, M.A., Conradt, E., & Crowell, S.E. (2019, March). *Pregnant women's self-reported emotion dysregulation predicts newborn neurobehavior*. Poster presented at the Society for Research in Child Development; Baltimore, MD.
10. Vlisides-Henry, R.D., **Ostlund, B.D.**, Conradt, E., & Crowell, S.E. (2018, July). *Associations between maternal emotion dysregulation during pregnancy and newborn neurobehavior*. Poster presented at the biennial meeting of the International Congress of

Infant Studies; Philadelphia, PA.

11. Brown, M.A., Conradt, E., **Ostlund, B.D.**, Terrell, S., & Crowell, S.E. (2018, July). *The unique and interactive effects of prenatal exposure to maternal emotion dysregulation and acute stress on infant stress reactivity*. Poster presented at the biennial meeting for the International Congress of Infant Studies; Philadelphia, PA.
12. Kaliush, P., Terrell, S., **Ostlund, B.D.**, Brown, M.A., Conradt, E., & Crowell, S.E. (2018, July). *Maternal childhood trauma and stress during pregnancy*. Poster presented at the biennial meeting for the International Congress of Infant Studies; Philadelphia, PA.
13. **Ostlund, B.D.**, Conradt, E., Marsit, C.J., Lester, B., & Tyrka, A.R. (2016, May). *FKBP5 in infancy: Interaction between maternal history of stress and placental methylation of HSD11 $\beta$ 2*. Poster presented as part of a poster symposium at the biennial meeting of the International Congress of Infant Studies; New Orleans, LA.
14. **Ostlund, B.D.**, Measelle, J.R., Conradt, E., & Ablow, J.C. (2015, March). *Differential susceptibility to childhood anxiety: Role of maternal anxiety and infant respiratory sinus arrhythmia*. Poster presented at the biennial meeting of the Society for Research in Child Development; Philadelphia, PA.
15. **Ostlund, B.D.**, Measelle, J.R., Laurent, H.M., Conradt, E., & Ablow, J.C. (2014, July). *Shaping psychophysiology: Attunement and divergence of respiratory sinus arrhythmia within mother-infant dyads*. Poster presented at the biennial meeting of the International Congress of Infant Studies; Berlin, Germany.
16. **Ostlund, B.D.**, Measelle, J.R., Conradt, E., & Ablow, J.C. (2013, April). *Mother-infant affective synchrony influences the association between maternal depression and infant vagal functioning*. Poster presented at the biennial meeting of the Society for Research in Child Development; Seattle, WA.

#### **TEACHING EXPERIENCE**

|      |  |  |
|------|--|--|
| 2018 | Graduate Instructor                                  | Development in Infancy<br>University of Utah             |
| 2018 | Guest Lecturer: Temperament<br>Dr. Elisabeth Conradt | Development in Infancy<br>University of Utah             |
| 2018 | Guest Lecturer: Epigenetics<br>Dr. Brennan Payne     | Cognitive Neuroscience<br>University of Utah             |
| 2016 | Guest Lecturer: Friendships<br>Dr. Cecilia Wainryb   | Childhood & Adolescent Development<br>University of Utah |
| 2014 | Graduate Teaching Assistant<br>Dr. Jennifer Ablow    | Seminar on Attachment<br>University of Oregon            |

## **HONORS/AWARDS**

|           |   |
|-----------|---|
| 2018-2019 | Graduate Research Fellowship, University of Utah Graduate School              |
| 2017      | Dissertation Funding Award, Society for Research in Child Development (SRCD)  |
| 2017      | Research Commendation, University of Utah Dept. of Psychology                 |
| 2016      | Graduate Research Award, Consortium for Families & Health Research (CFAHR)    |
| 2016      | Clayton Award for Excellence in Graduate Research                             |
| 2016      | Clayton Summer Research Assistantship, University of Utah Dept. of Psychology |
| 2013      | Departmental Honors, University of Oregon Dept. of Psychology                 |

## **MENTORSHIP**

|           |   |
|-----------|---|
| 2019-2020 | Supervised undergraduate independent research project<br>“Maternal mindfulness during pregnancy predicts newborn neurobehavior.”<br>Kristen Olavson<br>University of Utah |
| 2014-2015 | Supervised psychology honors student<br>“Association between early life adversity and inflammation during infancy.”<br>Jason David<br>University of Oregon                |

## **AD HOC REVIEWER**

*Biological Psychiatry*  
*Biological Psychology*  
*Child Development*  
*Clinical Epigenetics*  
*Developmental Cognitive Neuroscience*  
*Developmental Psychobiology*  
*Developmental Psychology*  
*Early Human Development*  
*Infant Behavior and Development*  
*Journal of Abnormal Child Psychology*  
*Journal of Clinical Child & Adolescent Psychology*  
*Journal of Traumatic Stress*  
*Psychoneuroendocrinology*  
*Stress*

## **RESEARCH INTERESTS**

Neural oscillations and aperiodic activity  
Newborn neurobehavior  
Temperament  
Developmental origins of health and disease (DOHaD)  
Perinatal maternal mental health

### **SPECIALIZED TRAININGS**

- |      |   |
|------|---|
| 2018 | Epigenetics Bootcamp<br>Columbia University; Instructor: Andrea Baccarelli, Ph.D.                                 |
| 2016 | Electroencephalography (EEG) with Infants and Young Children<br>Virginia Tech; Instructor: Martha Ann Bell, Ph.D. |
| 2016 | Advanced Psychophysiological Methods Seminar<br>University of Utah; Instructor: Sheila Crowell, Ph.D.             |
| 2016 | Perinatal Mood and Anxiety Disorder Seminar<br>Intermountain Healthcare; Instructor: Amy-Rose White, LCSW         |
| 2015 | NICU Network Neurobehavioral Exam<br>University of Utah Medical Center; Instructor: Lynne Andreozzi, Ph.D.        |
| 2015 | UCLA Life Stress Interview<br>University of Utah; Instructor: Constance Hammen, Ph.D.                             |