

LAUREL JOY GABARD-DURNAM

Plasticity in Neurodevelopment (PINE) Lab
Department of Psychology, Northeastern University
628 Interdisciplinary Science & Engineering Complex (ISEC)
805 Columbus Avenue, Boston Massachusetts 02120
l.gabard-durnam@northeastern.edu

ACADEMIC APPOINTMENTS

- 2020 - Assistant Professor of Psychology, Northeastern University (4th year, tenure-track)
- 2020 - Faculty, Center for Cognitive and Brain Health, Northeastern University
- 2019 – 2020 Postdoctoral Research Associate, Boston Children’s Hospital, Harvard University
- 2016 – 2019 Postdoctoral Fellow, Boston Children’s Hospital, Harvard University
Research mentors: Drs. Charles A. Nelson and Takao K. Hensch

EDUCATION

- 2016 **Columbia University**, New York, NY
Ph.D. in Psychology
- 2015 **Columbia University**, New York, NY
M.Phil. in Psychology
- 2012 **University of California, Los Angeles**, Los Angeles, CA
M.A. in Developmental Psychology
- 2011 **University of Cambridge**, Cambridge, England
M.Phil. in Experimental Psychology
- 2010 **Harvard University**, Cambridge, MA
B.A. in Neurobiology, *summa cum laude*
Highest Honors in Neurobiology, Minor: Celtic Literature

HONORS AND AWARDS

- 2023 International Society for Developmental Psychobiology David Kucharski Young Investigator Award
- 2022 American Psychological Association Science of Youth Summit Speaker
- 2021 Northeastern University Blavatnik Award nominee, Life Sciences division
- 2017 Boston Children’s Hospital Fellow Award, Division of Developmental Medicine
- 2015 The Edward E. Smith Memorial Award in Cognitive Neuroscience, Columbia University
- 2014 - 2016 Dean’s Fellowship, Columbia University
- 2011 Chancellor’s Prize Fellowship, UCLA
- 2011 Distinguished University Fellowship, UCLA
- 2010 Harvard-Cambridge Scholar Award
- 2009 Harvard College Research Award, Harvard University
- 2008 Harvard-Radcliffe Research Fellowship
- 2007 Harvard College Scholar, Harvard University

Training Fellowships and Travel Awards

2019	International Society for Developmental Psychobiology Travel Award
2016	National Science Foundation Conference Fellow “Transforming our understanding of maternal control over the infant brain”
2015	Society for Neuroscience Trainee Professional Development Travel Award
2015	NIMH Summer Institute in Cognitive Neuroscience Fellow, UCSB
2015	Graduate Student Advisory Council Travel Fellowship, Columbia University
2014	New York Academy of Sciences Travel Fellowship
2014	Psychology Department Travel Award, Columbia University
2013	Semel Institute of Neuroscience Graduate Travel Award, UCLA
2012	Neuroimaging Summer Institute Fellow, University of Maryland

PEER-REVIEWED PUBLICATIONS

* authors contributed equally

Undergraduate, post-baccalaureate, graduate, or post-doctoral mentee

Google Scholar metrics:

h-index: 31

i-10 index: 44

citations: 4700+

2024

54. Margolis, E. & Gabard-Durnam, L.J. Prenatal Influences on Postnatal Neuroplasticity: Integrating DOHaD and Sensitive/Critical Period Frameworks to Understand Biological Embedding in Early Development. (in press) *Infancy*.
53. Margolis, E., Davel, L., Bourke, N.J., Bosco, C., Zieff, M.R., Monachino, A.M., Mazubane, T., Williams, S.R., Miles, M., Jacobs, C.A., Williams, S., Bradford, L., Knipe, C., Madi, Z., Methola, B., Mhlakwaphalwa, T., Mlandu, N., Nkubungu, K., Nabi, Z.G., Pan, T., Samuels, R., Pini, N., Klepac-Ceraj, V., Fifer, W.P., Alexander, D.C., Jones, D.K., Williams, S.C.R., Amso, D., Donald, K.A.* , & Gabard-Durnam, L.J.*. Longitudinal effects of prenatal alcohol exposure on visual neurodevelopment over infancy. (in press) *Developmental Psychology*.
52. Nwakamma, M., Stillman, A., **Gabard-Durnam, L.J.**, Cavanagh, J.F., Hillman, C.H., Morris, T.P. Spectral parameterization reveals slowing of alpha peak frequency following mild traumatic brain injury. (in press) *Neurotrauma Reports*.
51. Cline, T.L., Morfini, F., Tinney, E., Makarewycz, E., Olafsson, V., Bauer, C.C., Kramer, A.F., Raine, L.B., **Gabard-Durnam, L.J.**, Whitfield-Gabrieli, S., Hillman, C.H. Resting-state functional connectivity change in frontoparietal and default mode networks after acute exercise in youth. (in press) *Brain Plasticity*.
50. Zeiff, M., Miles, M., Mbale, E., Eastman, E., Ginnell, L., Williams, S.C.R., Jones, D.K., Alexander, D.C., Wijeratne, P.A., **Gabard-Durnam, L.J.**, Klepac-Ceraj, V., Bonham, K.S., Pini, N., Sania, A., Lucchini, M., Deoni, S., Fifer, W.P., Gladstone, M., Amso, D.* , Donald, K*. Characterizing developing executive functions in the first 1000 days in South Africa and Malawi: The Khula Study. (in press) *Wellcome Open Research*.

2023

49. Lopez, K.L., Monachino, A.D., Vincent, K.M., Peck, F.C., Gabard-Durnam, L.J. Stability, change, and

reliable individual differences in electroencephalography measures: a lifespan perspective on progress and opportunities. (2023) *NeuroImage*.

48. McDonald, K., **Gabard-Durnam**, L.J., Beaudry, K.M., Lisio, M.D., Raine, L., Bernard-Willis, Y., Watrous, J., Whitfield-Gabrieli, S., Kramer, A.F., Hillman, C. Cross-sectional analysis reveals COVID-19 pandemic community lockdown was linked to dysregulated cortisol and salivary alpha amylase in children. (2023) *Frontiers in Public Health*.
47. Law, E.C., Han, M.X., Lai, Z., Lim, S., Ong, Z.Y., Ng, V., **Gabard-Durnam**, L.J., Wilkinson, C.L., Levin, A.R., Rifkin-Graboi, A., Daniel, L.M., Gluckman, P.D., Chong, Y.S., Meaney, M.J., Nelson, C.A. Associations between infant screen use, EEG markers, and cognitive deficits: A mediation analysis. (in press) *JAMA Pediatrics*.
46. Heleniak, C., Goff, B., **Gabard-Durnam**, L.J., Telzer, E., Humphreys, K.L., Lumian, D.L., Flannery, J., Caldera, C., Shapiro, M., Louie, J., Shen, J., Vanucci, A., Jain, M., Glatt, C., Tottenham, N. Telomere Erosion and Depressive Symptoms across Development following Institutional Care. (2023) *Journal of the American Academy of Child and Adolescent Psychiatry*.

2022

45. McLaughlin, K. & **Gabard-Durnam**, L.J. Experience-driven plasticity and the emergence of psychopathology: a mechanistic framework integrating development and the environment into the Research Domain Criteria (RDoC) model. (2022) *Journal of Psychopathology and Clinical Science*.
44. Monachino, A., Lopez, K., Pierce, L.J., **Gabard-Durnam**, L.J. The HAPPE plus event-related (HAPPE+ER) software: a standardized processing pipeline for event-related potential analyses. (2022) *Developmental Cognitive Neuroscience*.
43. Lopez, K., Monachino, A., Morales, S., Leach, S.C., Bowers, M.E., **Gabard-Durnam**, L.J. HAPPILEE: HAPPE in low electrode encephalography, a standardized software for lower density recordings. (2022) *NeuroImage*.
42. Cornelissen, L., Underwood, E., **Gabard-Durnam**, L.J., Soto, M., Tao, A., Nelson, C.A., Hensch, T.K., Berde, C.B. Tactile sensitivity and motor coordination in infancy: effect of age, prior surgery, anesthesia & critical illness. (2022) *Plos One*.
41. Bloom, P.A., VanTieghem, M., **Gabard-Durnam**, L.J., Gee, D.G., Flannery, J., Caldera, C., Goff, B., Telzer, E.H., Humphreys, K.L., Fareri, D.S., Shapiro, M., Algharazi, S., Bolger, N., Aly, M., Tottenham, N. Age-related change in task-evoked amygdala-prefrontal circuitry: a multiverse approach with an accelerated longitudinal cohort aged 4-22 years. (2022) *Human Brain Mapping*.
40. Gee, D., Hanson, C., Caglar, L.R., Fareri, D.S., **Gabard-Durnam**, L.J., Mills-Finnerty, C., Goff, B., Caldera, C.J., Lumian, D.S., Flannery, J., Hanson, S.J., Tottenham, N. Experimental evidence for a child-to-adolescent switch in human amygdala-prefrontal cortex communication: a cross-sectional pilot study. (2022) *Developmental Science*.

2021

39. Glauser, J., Wilkinson, C.L., **Gabard-Durnam**, L.J., Choi, B., Tager-Flusberg, H., Nelson, C.A. Neural correlates of face processing associated with language and social development in 12-month infants with familial risk of autism spectrum disorder. (2021) *Journal of NeuroDevelopmental Disorders*.
38. Peck, F., **Gabard-Durnam**, L.J.*, Wilkinson, C.*, Bosl, W., Tager-Flusberg, H., Nelson, C.A. Prediction of

autism spectrum disorder diagnosis using nonlinear measures of language-related EEG at 6 and 12 months of age. (2021) *Journal of NeuroDevelopmental Disorders*.

37. Romeo, R.R., Choi, B., **Gabard-Durnam**, L.J., Wilkinson, C., Levin, A.R., Rowe, M.L., Tager-Flusberg, H., Nelson, C.A. Parental language input predicts neurooscillatory patterns associated with language development in infants at risk of Autism. (2021). *Journal of Autism and Developmental Disorders*.
36. Mariscal, M.G.*, Levin, A.R.*, **Gabard-Durnam** L.J., Xie, W., Tager-Flusberg, H., Nelson, C.A. EEG phase-amplitude coupling and phase preference over the first three years after birth (2021). *ENeuro*.

2020

35. **Gabard-Durnam**, L.J., McLaughlin, K.A. (2020) Sensitive periods in human development: charting a course for the future. *Current Opinion in Behavioral Sciences*, 36: 120 -128.
34. Nelson, C.A., **Gabard-Durnam**, L.J. (2020) Early adversity and critical periods: neurodevelopmental consequences of violating the expectable environment. *Trends in Neurosciences*, 43:133-143.
33. VanTieghem, M., Korom, M., Flannery, J., Choy, T., Caldera, C., Humphreys, K.L., **Gabard-Durnam**, L.J., Goff, B., Gee, D.G., Telzer, E., Shapiro, M., Louie, J., Fareri, D., Bolger, N., Tottenham, N. (2020) Longitudinal changes in amygdala, hippocampus and cortisol development following early caregiving adversity. *Developmental Cognitive Neuroscience*.

2019

32. **Gabard-Durnam**, L.J., Wilkinson, C., Kapur, K., Tager-Flusberg, H., Levin, A., Nelson, C.A. (2019) EEG power in the first year of life best predicts autism outcomes: a longitudinal assessment across the first three years. *Nature Communications* 10:4188.
31. **Gabard-Durnam**, L.J., McLaughlin, K.A. (2019) Do sensitive periods exist for exposure to adversity? *Biological Psychiatry* 85: 789-791.
30. Wilkinson, C., **Gabard-Durnam**, L.J., Kapur, K., Tager-Flusberg, H., Levin, A., Nelson, C.A. (2019). Use of longitudinal EEG measures in estimating language development in infants with and without familial risk for autism spectrum disorder. *Neurobiology of Language*.
29. Valdes, V., Zorilla, C., **Gabard-Durnam**, L.J., Muler, N., Rahman, Z., Rivera, D., Nelson, C.A. (2019). Cognitive development of infants exposed to the Zika virus in San Juan, Puerto Rico. *JAMA Network Open*.
28. Wilkinson, C., Levin, A., **Gabard-Durnam**, L.J., Tager-Flusberg, H., Nelson, C.A. (2019) Reduced frontal gamma power at 24 months is associated with better expressive language in toddlers at risk for Autism. *Autism Research*.
27. Callaghan, B., Gee, D., **Gabard-Durnam**, L.J., Telzer, E., Humphreys, K., Goff, B., Shapiro, M., Flannery, J., Lumian, D., Fareri, D., Caldera, C., Tottenham, N. (2019) Decreased amygdala reactivity to parent cues protects against anxiety following early adversity: an examination across 3 years. *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging*.
26. Callaghan, B., Fields, A., Gee, D.G., **Gabard-Durnam**, L., Caldera, C., Humphreys, K., Goff, B., Flannery, J., Telzer, E., Shapiro, M., Tottenham, N. (2019) Mind and gut: associations between mood and gastrointestinal distress in children exposed to adversity. *Development and Psychopathology*.

2018

25. **Gabard-Durnam**, L.J.*, O’Muircheartaigh, J.*, Dirks, H., Dean III, D.C., Tottenham, N., Deoni, S. (2018) Human amygdala functional network development: a cross-sectional study from 3 months to 5 years of age. *Developmental Cognitive Neuroscience* 34: 63-74.
24. **Gabard-Durnam**, L.J., Mendez Leal, A., Levin, A. (2018). The Harvard Automated Processing Pipeline for Electroencephalography (HAPPE): standardized processing software for developmental and high-artifact data. *Frontiers in Neuroscience: Brain Imaging Methods* doi: 10.3389/fnins.2018.00097.
23. Humphreys, K. L., **Gabard-Durnam**, L., Goff, B., Telzer, E. H., Flannery, J., Gee, D. G., Park, V., Lee, S. S., Tottenham, N. (2018). Friendship and social functioning following early institutional rearing: The role of ADHD symptoms. *Development and Psychopathology*.
22. Levin, A., Mendez Leal, A., **Gabard-Durnam**, L.J., O’Leary, H. (2018) The Batch Electroencephalography Automated Processing Platform (BEAPP). *Frontiers in Neuroscience: Brain Imaging Methods* doi: 10.3389/fnins.2018.00513.
21. Odriozola, P., Dajani, D.R., Burrows, C.A., Uddin, L.Q., **Gabard-Durnam**, L.J., Tottenham, N., Gee, D.G. (2018). Atypical frontoamygdala functional connectivity in youth with autism. *Developmental Cognitive Neuroscience*.

2017

20. Tottenham, N. & **Gabard-Durnam**, L.J. The developing amygdala: a student of the world and a teacher of the cortex. (2017) *Current Opinion in Psychology* 17: 55-60.
19. Fareri D.S., **Gabard-Durnam** L.J., Goff B., Flannery J., Gee D.G., Lumian D.S., Caldera C., Tottenham N. (2017) Altered ventral striatal-medial prefrontal cortex resting-state connectivity mediates adolescent social problems after early institutional care. *Development and Psychopathology* 29: 1865-1876.
18. Flannery, J., **Gabard-Durnam**, L., Shapiro, M., Goff, B., Caldera, C., Louie, J., Gee, D., Telzer, E., Humphreys, K., Lumian, D., Tottenham, N. (2017) Diurnal Cortisol after Early Institutional Care-Age Matters. *Developmental Cognitive Neuroscience* 25: 160-166.
17. VanTieghem, M., **Gabard-Durnam**, L., Goff, B., Flannery, J., Humphreys, K., Telzer, E., Caldera, C., Louie, J., Shapiro, M., Bolger, N., Tottenham, N. (2017) Positive valence bias and parent-child relationship security moderate the association between early institutional caregiving and internalizing symptoms. *Development and Psychopathology* 29: 519-533.
16. Silvers, J.A., Goff, B., **Gabard-Durnam**, L.J., Gee, D.G., Fareri, D.S, Caldera, C., Tottenham, N. (2017) Vigilance, the amygdala, and anxiety in youth with a history of institutional care. *Biological Psychiatry: Cognitive Neuroscience and NeuroImaging* 2: 493-501.

2016

15. **Gabard-Durnam**, L.*, Gee, D.G.*, Goff, B., Flannery, J., Telzer, E., Humphreys, K., Lumian, D., Fareri, D.S., Caldera, C., Tottenham, N. (2016) Stimulus-elicited connectivity influences resting-state connectivity years later in human development: a prospective study. *Journal of Neuroscience* 36: 4771-4784.
14. Silvers, J., Lumian, D., **Gabard-Durnam**, L.J., Gee, D., Goff, B., Fareri, D., Caldera, C., Flannery, J., Telzer, E., Humphreys, K., Tottenham, N. (2016) Previous institutionalization is followed by broader amygdala-hippocampal-PFC network connectivity during aversive learning in human development. *Journal of Neuroscience* 36: 6420-6430.

13. Green, S., Goff, B., Gee, D.G., **Gabard-Durnam**, L.J., Flannery, J., Telzer, E., Humphreys, K.L., Louie, J., Tottenham, N. (2016) Discrimination of amygdala response predicts future separation anxiety in youth with early deprivation. *Journal of Child Psychology and Psychiatry* 57: 1135-1144.

2015

12. **Gabard-Durnam**, L., Tierney, A., Vogel-Farley, V., Tager-Flusberg, H., Nelson, C. (2015) Alpha asymmetry in infants at risk for autism spectrum disorders. *Journal of Autism and Developmental Disorders* 45: 473-480.
11. Fareri, D.S., **Gabard-Durnam**, L., Goff, B., Flannery, J., Gee, D.G., Lumian, D.S., Caldera, C., Tottenham, N. (2015) Normative development of ventral striatal resting-state connectivity in humans. *NeuroImage* 118: 422-437.
10. Humphreys, K. L., Telzer, E. H., Flannery, J., Goff, B., **Gabard-Durnam**, L., Gee, D. G., Lee, S. S., Tottenham, N. (2015) Risky decision-making from childhood through adulthood: Contributions of learning and sensitivity to negative feedback. *Emotion* 16: 101-109.
9. Telzer, E.H., Flannery, J., Humphreys, K.L., Goff, B., **Gabard-Durman**, L., Gee, D.G., Tottenham, N. (2015) "The Cooties Effect": Amygdala reactivity to opposite- versus same-sex faces declines from childhood to adolescence. *Journal of Cognitive Neuroscience* 27: 1685-1696.
8. Humphreys, K. L., Lee, S. S., Telzer, E. H., **Gabard-Durnam**, L.J., Goff, B., Flannery, J., Tottenham, N. (2015) Exploration-exploitation strategy is dependent on early experience. *Developmental Psychobiology* 57: 313-321.

2014

7. **Gabard-Durnam**, L., Flannery, J., Goff, B., Gee, D., Telzer, E., Humphreys, K., Hare, T., Tottenham, N. (2014) The development of human amygdala-cortical functional connectivity at rest from 4 to 23 years: a cross-sectional study. *NeuroImage* 95: 193-207.
6. Gee, D.G. *, **Gabard-Durnam**, L. *, Telzer, E.H., Humphreys, K.L., Goff, B., Shapiro, M., Flannery, J., Lumian, D.S., Fareri, D.S., Caldera, C., Tottenham, N. (2014) Maternal buffering of human amygdala-prefrontal circuitry during childhood. *Psychological Science* 25: 2067-2078.

2013

5. Gee, D.G., **Gabard-Durnam**, L., Flannery, J., Goff, B., Humphreys, K.L., Telzer, E.H., Hare, T.A., Bookheimer, S.Y., Tottenham, N. (2013) Early Developmental Emergence of Human Amygdala-PFC Connectivity after Maternal Deprivation. *Proceedings of the National Academy of Sciences*, 110: 15638–15643.
4. Telzer, E., Flannery, J., Shapiro, M., Humphreys, K., Goff, B., **Gabard-Durnam**, L., Gee, D., Tottenham, N. (2013) Early experience shapes amygdala sensitivity to race: an international adoption design. *Journal of Neuroscience* 33: 13484-13488.
3. Tottenham, N., Phuong, J., Flannery, J., **Gabard-Durnam**, L., Goff, B. (2013) A negativity bias for ambiguous facial expression valence during childhood: Converging evidence from behavior and facial corrugator muscle responses. *Emotion* 13: 92-103.

2012

2. Tierney, A.L., **Gabard-Durnam**, L., Vogel-Farley, V., Tager-Flusberg, H., Nelson, C.A. (2012)

Developmental Trajectories of resting EEG power: an endophenotype of autism spectrum disorder.
PLOS one 7: e39127.

1. Goff, B., Gee, D., Telzer, E., Humphreys, K., **Gabard-Durnam**, L., Flannery, J., Tottenham, N. (2012) Reduced nucleus accumbens reactivity and depression following early-life stress. *Neuroscience* 249: 129-138.

WHITE PAPER PUBLICATIONS

Measuring Brain Health in Early Life. (2023) The World Health Organization, Brain Health Division.
 E-link to publication: <https://www.who.int/publications/i/item/9789240084797>

SUBMITTED MANUSCRIPTS

* or ^ indicate authors contributed equally

Kathios, N.*, Lopez, K.L.*, **Gabard-Durnam**, L.J.^, Loui, P^, Music@Home-Retrospective: a new measure to retrospectively assess childhood home musical environments. (in revision)

Gabard-Durnam, L.J., Hensch, T.K., & Tottenham, N. Music from a childhood sensitive period regulates emotion in adulthood. (under review) Preprint available: <https://doi.org/10.1101/412007>

Mlandu, N., McCormick, S.A., ... Donald, K.A., **Gabard-Durnam**, L.J. Evaluating a Novel High-Density EEG Sensor Net Structure for Improving Inclusivity in Infants with Curly or Tightly Coiled Hair. (in revision)
 Preprint available: <https://www.biorxiv.org/content/10.1101/2024.03.18.584988v1>

***has resulted in the new product we helped validate now for sale through EGI Magstim company**

Forest, T., McCormick, S.A., ... Amso, D., Donald, K.A., **Gabard-Durnam**, L.J. Early caregiver predictability shapes statistical learning later in infant neurodevelopment. (under review)

Xu, Wenyi, Monachino, A., ... **Gabard-Durnam**, L.J, Morales, S. Advancing the Reporting of Developmental EEG Data: Tools for Estimating Reliability, Effect Size, and Data Quality Metrics. (invited submission to special issue, submitted)

Desowska, A., Coffman, S., Kim, I., Underwood, E., Tao, A., Lopez, K.L., Nelson, C.A., Hensch, T.K, **Gabard-Durnam**, L.J., Cornelissen, L. Neurodevelopment of children exposed to prolonged anesthesia in infancy: GABA study interim analysis of resting-state brain networks at 2, 4, and 10-months old. (in revision)

Fox, N., Perez-Edgar, K., Morales, S., Campbell, A., Cavanaugh, J.F., **Gabard-Durnam, L.J.**.....and the HBCD EEG Workgroup. The development and structure of the HEALthy Brain and Child Development (HBCD) Study EEG protocol. (under review)

Tarullo, A.R., Leppanen, J.M., Evans, D., Coetzee, L., Lopera-Perez, D.C., Brady, S.P., **Gabard-Durnam**, L.J., Fink, G., Hamer, D.H., Yousafzai, A., Rockers, P.C. Neonatal physical growth predicts EEG power in rural South African children. (in revision)

OPEN-SOURCE VALIDATED SOFTWARE PACKAGES

HAPPE 4.+ (2023)

Monachino, A.D., Lopez, K.L., Ghosh, P., Rodriguez, J., **Gabard-Durnam**, L.J.
 GitHub Repository: <https://github.com/PINE-Lab/HAPPE>

HAPINNES (2022)

Monachino, A.D., Lopez, K.L., Gabard-Durnam, L.J.
 GitHub Repository: <https://github.com/PINE-Lab/HAPPE>

HAPPE+ER (2021)

Monachino, A.D., Lopez, K.L., Gabard-Durnam, L.J.
 GitHub Repository: <https://github.com/PINE-Lab/HAPPE>

HAPPILEE (2021)

Monachino, A.D., Lopez, K.L., Gabard-Durnam, L.J.
 GitHub Repository: <https://github.com/PINE-Lab/HAPPE>

HAPPE 1.0 (2018)

Gabard-Durnam, L.J., Mendez Leal, A.S., Wilkinson, C.L., Levin, A.R.
 GitHub Repository: <https://github.com/lcnhappe/happe>.

BEAPP (2018)

Levin, A.R., Mendez Leal, A.S., **Gabard-Durnam, L.J.**, O'Leary, H.
 GitHub Repository: <https://github.com/lcnbeapp/beapp>.

OPEN-SOURCE VALIDATED QUESTIONNAIRES

* or ^ authors contributed equally

The POSDEV (Predictability, Opportunity, Safety Dimensions of Environmental Variability) Retrospective Questionnaire (2023)

Lopez, K.L.*, Kathios, N.*, **Gabard-Durnam, L.J.**
<https://www.plasticityinneurodevelopmentlab.com/pos-dev-retrospective>

The Music@Home Retrospective Questionnaire (2023)

Kathios, N.*, Lopez, K.L.*, **Gabard-Durnam, L.J.**^, Loui, P.^
<https://www.plasticityinneurodevelopmentlab.com/musichome-retrospective>

OPEN-SOURCE DATASETS

* or ^ authors contributed equally

Kathios, N.* , Lopez, K.L.* , Gabard-Durnam, L.J.^, Loui, P.^ (2023) Music@Home-Retrospective Scale validation. Data and Code: https://osf.io/eq496/?view_only=9e22709a179a4aa3a791b44ce884198f.

Monachino, A.D., Lopez, K.L., Underwood, E., Tao, A., Nelson, C.A., Berde, C., Cornelissen, L., Hensch, T.K., **Gabard-Durnam, L.J.** (2021) Visual-Evoked Potential (VEP) event-related files from the General Anesthesia and Brain Activity (GABA) Study. DOI:10.5281/zenodo.5172962

Lopez, K.L., Monachino, A.D., Morales, S., Leach, S., Bowers, M., Zeanah, C., Marshall, P., Fox, N., Nelson, C.A., **Gabard-Durnam, L.J.** (2021) Low Density EEG Files from the Bucharest Early Intervention Project for HAPPILEE Software. DOI: 10.5281/zenodo.5088346.

Gabard-Durnam, L.J.*, O'Muircheartaigh, J.* , Dirks, H., Dean III, D.C., Tottenham, N., Deoni, S. (2018) Data accompanying: Human amygdala functional network development: a cross-sectional study from 3 months to 5 years of age. Mendeley.

Levin, A.R., **Gabard-Durnam, L.J.**, Mendez Leal, A.S., O'Leary, H.M., Wilkinson, C.L., Tager-Flusberg, H., Nelson, C.A. (2017) Infant Sibling Project: Sample Files. DOI: 10.5281/zenodo.998965.

EXTERNAL CURRENT FUNDING (\$5,122,680)

INV-047884

Bill and Melinda Gates Foundation

“Scalable EEG-based neuromodeling of early development: detecting sensitive windows for intervention”

2022-2025

Total Costs to LGD: \$2,998,680

Role: Principal Investigator

1Kd Award

Wellcome Leap Foundation

“Discovering new EEG metrics of infant brain plasticity”

2022 - 2024

Total Costs to LGD: \$615,000

Role: Principal Investigator

1Kd Award

Wellcome Leap Foundation

“A multi-scale approach to characterizing developing executive functions”

2021 – 2024

Total Costs to LGD: \$1,509,000

Role: Co-Principal Investigator (PI: Kirsten Donald)

NIH: National Institute on Drug Abuse U01

Healthy Brain and Child Development (HBCD) National Consortium

2021 - 2026

Role: consultant (PI: Ellen Grant)

NIH: National Institute on Alcohol Abuse and Alcoholism

Neurodevelopmental Effects of Prenatal Exposure to Maternal Drinking, Smoking and Adverse Psychosocial Factors: Deep Phenotyping of Infant CNS and ANS Function

2022 - 2025

Role: consultant (PI: William Fifer)

INTERNAL CURRENT FUNDING (\$175,000)

Center for Cognitive and Brain Health Seed Grant

“Enriched arts-based curricula (ABC) & emotion regulation in children: Feasibility of “The Enriched ABC Study”

Total Costs: \$75,000

Role: Co-Principal Investigator (PI: Aston McCullough)

Center for Cognitive and Brain Health Seed Grant

Northeastern University

“Musical Reward in Childhood and Adolescence: Buffering Early Life Adversity for Adaptive Decision-Making”

2023-2024

Total Costs: \$50,000

Role: Co-Principal Investigator (Co-PIs: Psyche Loui, Juliet Davidow)

Tier 1 Program Seed Grant

Northeastern University

“BEaNS-EL: Body composition, EEG, And NnS in Early Life”

Total Costs: \$50,000

2023-2024

Role: Co-Principal Investigator (PI: Lauren Raine)

MENTORED FUNDING (currently \$291,750)

DGE-1144087 Graduate Research Fellowship Award

National Science Foundation

“Musical reward across development”

2023 – 2026

Total Costs: \$111,000

Role: Mentor (PI: Nick Kathios)

DGE-1144087 Graduate Research Fellowship Award

National Science Foundation

“Auditory Sensitive Period Timing and Language Development in Infants”

2023 – 2026

Total Costs: \$111,000

Role: Mentor (PI: Kelsie Lopez)

DGE-1144087 Graduate Research Fellowship Award

National Science Foundation

“Emotion regulation in daily life and laboratory contexts: assessing capacity vs. tendency”

2023 – 2026

Total Costs: \$111,000

Role: Mentor for application (PI: Alexa Monachino, accepted to clinical psychology program)

Center for Cognitive and Brain Health Graduate Fellowship

Northeastern University

Total Costs: \$41,000

2024 - 2025

Role: Mentor (PI: Emma Margolis)

AJC STEM Graduate Student Fellowship

Northeastern University

Total Costs: \$28,000

2022-2024

Role: Mentor (PI: Kelsie L. Lopez)

PEAK Experience Award

Northeastern University

Total Costs: \$750

2024

Role: Mentor (PI: Saniya Burman)

Summer Undergraduate Psychology Experience In Research (SUPER) Fellowship

American Psychological Association (awarded to only 25 students nationally)

Total Costs: \$5,000

2023

Role: Mentor (PI: Melany Morales)

Northwestern Summer Undergraduate Research Grant

Northwestern University

Total Costs: \$4,000

2023

Role: Mentor (PI: Melany Morales)

DGE-1144087 Graduate Research Fellowship Award

National Science Foundation

Honorable Mention 2023

“Effects of biological and psychosocial adversities on developmental timing of prefrontal cortex and emotion”

Role: Mentor (PI: Katherine Vincent)

Future Faculty Fellowship for Postdoctoral Scholars

Northeastern University

Total Costs: \$60,000

2022-2023

Role: Mentor (PI: Sarah McCormick)

Paul and Grace Martinez Undergraduate Research Fellowship

Northeastern University

“Effects of GABA-ergic drug exposure on the neuroplasticity of language learning”

Total Costs: \$10,000

Spring 2022

Role: Mentor (PI: Ana Sobrino)

PENDING GRANT SUPPORT

Wellcome Trust Foundation

“Neurodevelopmental Timing, Environmental Exposures, and Longitudinal Trajectories: Charting Executive Functions Emergence in Two African Countries”

Role: Co-Principal Investigator (PI: Kirsten Donald)

Spencer Foundation Large Research Grant (Letter of Intent)

“Enriched arts-based curricula (ABC) & emotion regulation in children: Efficacy of ‘The Enriched ABC Study’”

Role: Co-Principal Investigator (PI: Aston McCullough)

National Institutes of Health NRSA F32 Postdoctoral Fellowship

“Discovering how emerging oscillatory dynamics interact with attention to shape memory representations in infancy”

Total costs: \$210, 372

Mentee: Tess A. Forrest

Role: Co-Sponsor

Scores: 24th percentile, funding line is 31nd percentile

National Institutes of Health K99/R00 Pathway to Independence Award

Mentee: Caroline Kelsey

Role: Co-Mentor

COMPLETED GRANT SUPPORT

INV-005789

Bill and Melinda Gates Foundation

“Early EEG predictors of neurodevelopmental outcomes”

2020 – 2023

Total Costs to LGD: \$820,000
Role: Co-Principal Investigator (dual-PI award)

Autism Science Foundation & Rett Syndrome Research Foundation

“Examining brain function during language critical periods in ASD development”
2018 – 2019

Total Costs: \$35,000
Role: Principal Investigator

DGE-1144087 Graduate Research Fellowship Award

National Science Foundation
“Development of intrinsic functional connectivity between the amygdala and prefrontal cortex”
2012 – 2016

Total Costs: \$95,000
Role: Principal Investigator

Staglin IMHRO Center for Cognitive Neuroscience

“Childhood as a human sensitive period for emotion regulation circuitry development”
2013 – 2014

Total Costs: \$12,000
Role: Co-Investigator (PI: Nim Tottenham)

Seed Grant

Early Experience, Stress, & Neurodevelopment Center (PI: Megan Gunnar)
“A pilot study on early adversity-induced acceleration of a human sensitive period for emotion regulation”
2013 – 2014

Total Costs: \$5,000
Role: Co-Investigator (PI: Nim Tottenham)

Graduate Research Award & Summer Award

University of California, Los Angeles
“Effects of early environmental stress on amygdala-cortical functional connectivity development”
2012 – 2013

Total Costs: \$26,000
Role: Principal Investigator

Lionel de Jersey Harvard-Cambridge Scholarship

Harvard University
“Effects of dominance hierarchy and conspecific social behavior on social learning in *Aphelocoma californica*”
2010 – 2011

Total Costs: \$120,000
Role: Principal Investigator

INTERNATIONAL/NATIONAL INVITED TALKS (16 completed as faculty)

2024 **Johns Hopkins University**, MD (March) Kennedy Fellows Association Lecture
“Sensitive Periods in Human Development”

2023 **World Health Organization**, Geneva, Switzerland (May)
“Scalable Brain Health Measurement”

2023 **Boston University**, Developmental Science Program Colloquium, Boston, MA (April)

- “Mechanisms of Plasticity in Development”
- 2023 **Wellcome Leap Program**, Capetown, South Africa (March)
“Multi-site EEG: Findings and Opportunities”
- 2023 **36th Annual Winter Conference in Developmental Psychobiology**, Dominican Republic (January)
“Brain-environment interactions and individual differences”
- 2022 **Northwestern University**, Cognitive Science Program Colloquium, Chicago, IL (December)
“Mechanisms of Plasticity in Development”
- 2022 **Harvard Medical School**, Center for Depression, Anxiety, and Stress Research, Boston, MA (October)
“About time: Plasticity across development”
- 2022 **University of Massachusetts, Amherst**, Department of Psychology, Amherst, MA (October)
“About time: Plasticity across development”
- 2023 **Wellcome Leap Program**, London, England (September)
“Scalable high-density EEG to measure brain health”
- 2022 **American Psychological Association Convention**, Science of Youth Summit (August)
“Mechanisms of plasticity in human development”
- 2022 **National Institutes of Health** workshop on measuring brain change (March)
“Identifying individual indices of learning and development with EEG methods”
- 2022 **Brown University**, Department of Psychology, Developmental Area, Providence, RI (February)
“Exploring sensitive periods of plasticity in human development”
- 2020 **University of Southampton**, Center for Innovation in Mental Health, Southampton, UK (November)
“Exploring sensitive periods of plasticity in human development”
- 2020 **American University**, Center for Neuroscience and Behavior, Washington, DC (October)
“Exploring sensitive periods of plasticity in human development”
- 2020 **University of California, Los Angeles**, Department of Psychology, Los Angeles, CA (October)
“Exploring sensitive periods in human neurodevelopment”
- 2020 **University of Chicago**, Department of Psychology, Chicago, IL (January)
“Critical periods in socioemotional development”
- 2020 **University of Oregon**, Department of Psychology, Eugene, OR (January)
“Critical periods in socioemotional development”
- 2019 **Northeastern University**, Department of Psychology, Boston, MA (December)
“Developmental critical periods in brain and cognitive health”
- 2019 **Pomona College**, Pomona, CA (November)
“Critical periods in socioemotional development”
- 2019 **Bill & Melinda Gates Foundation**, Seattle, WA (May)
“Predicting outcomes in infants at high risk for autism using EEG”

- 2018 **Massachusetts Institute of Technology** Simons Center for the Social Brain (September)
“Translational biomarkers in autism: evidence from EEG during the first 12 months”
- 2018 **Bill & Melinda Gates Foundation**, Seattle, WA (July)
“Longitudinal EEG power predicts diagnostic and language outcomes in infants at high risk for autism”
- 2018 **Harvard University**, Department of Psychology, Affective Neuroscience and Development Lab, Cambridge, MA (April)
“Quantifying Sensitive Period Dynamics in the Human Brain”
- 2017 **Boston University**, Center for Autism Research Excellence, Boston, MA (March)
“Autism Spectrum Disorder: A critical periods approach”
- 2016 **University of California, Los Angeles**, Department of Developmental Psychology, Los Angeles, CA (April)
“Experience-dependent development of prefrontal-amygdala circuitry and function”
- 2016 **Dartmouth College**, Department of Psychological and Brain Sciences, Hanover, NH (March)
“Experience-dependent development of prefrontal-amygdala circuitry and function”
- 2016 **Weill Cornell Medical College**, Sackler Institute for Developmental Psychobiology, New York, NY (February)
Gabard-Durnam, L.J., & Weber, J.
“Correcting for multiple comparisons in fMRI: methodological updates”
- 2015 **Weill Cornell Medical College**, Sackler Institute for Developmental Psychobiology, New York, NY (November)
“Converging evidence for a human medial prefrontal cortex sensitive period in childhood”
- 2015 **Columbia University**, Emeritus Professors In Columbia Annual Meeting, New York, NY (November)
“Reliving your childhood: how childhood experiences shape adult brains and behavior.”

INVITED WORKSHOPS (8 as faculty to date)

I give workshops (1.5-4 hours long) on robust developmental EEG processing approaches, including teaching tutorials for the software packages my lab develops. Workshops range from 20 – 100+ participants.

- 2024** Fetal Infant and Toddler Neuroimaging Group (FIT'NG) Workshop
“HAPPE 4.1 tutorial”
*most widely-attended workshop in the series for FIT'NG to date
- 2023** Columbia University, New York, NY
“HAPPE 4.0 for robust EEG analysis”
- 2023** Boston Children’s Hospital, Boston, MA
“HAPPE 3.2 for robust EEG analysis”
- 2023** Boston University, Boston, MA
“HAPPE 3.2 for robust EEG analysis”
- 2022** Northwestern University, Chicago, IL
“HAPPE 3.2 for robust EEG analysis”
- 2021** International Society for Developmental Psychobiology & MagstimEGI Corporate Sponsor

“Robust developmental EEG practices from collection to analysis”

- 2021** Northeastern University
“HAPPILEE for low-density EEG data analysis”
- 2021** Boston Children’s Hospital
“HAPPE+ER for event-related potential research”
- 2019** Perinatal Preconference to the International Society for Developmental Psychobiology
“The Harvard Automated Preprocessing Pipeline for EEG: HAPPE software”

INTERNATIONAL/NATIONAL CONFERENCE TALKS

- 2023** Symposium: Novel Insights from Lifespan Development.
FLUX Congress
- 2023** Young Investigator Award Address
International Society for Developmental Psychobiology, Utrecht, Netherlands (July)
- 2022** Symposium: Getting the Most out of Infant EEG Data - State of the Art Techniques and Meta-scientific Perspectives
International Congress of Infant Studies Montreal, Canada (July)
Gabard-Durnam L.J., K. Lopez, A.D. Monachino “HAPPE 3.0 and the role of standardized EEG/ERP software in promoting good scientific practice.”
- 2019** Wiley Early Investigator Symposium
International Society for Developmental Psychobiology, Chicago, IL (October)
Gabard-Durnam L.J., Hensch, T.K., Tager-Flusberg, H., Nelson, C.A. “Translational biomarker of delayed sensitive period onset in Autism Spectrum Disorder.”
- 2019** Perinatal Preconference to the International Society for Developmental Psychobiology, Chicago, IL
Invited Workshop Speaker (October 2019)
The HAPPE software for contemporary electrophysiology analysis: method and practice.
- 2019** Eastern Psychological Association, New York, NY
Invited Symposium.
Gabard-Durnam L.J., Hensch, T.K., Tager-Flusberg, H., Nelson, C.A. “Translating measures of sensitive period onset to inform disordered development.”
- 2019** Society for Research in Child Development, Baltimore, MD
Gabard-Durnam, L.J., Fareri, D.S., Goff, B., Flannery, J., Gee, D.G., Caldera, C., Telzer, E., Humphreys, K.L., Shapiro, M., Tottenham, N. “Parental deprivation induced alterations in amygdala-cortical functional connectivity across human development as risk and resilience factors for internalizing symptomatology.”
- 2018** Society for Neuroscience, San Diego, CA
Gabard-Durnam L.J., Tager-Flusberg, H., Nelson, C.A. “An EEG biomarker quantifying sensitive period onset in Autism Spectrum Disorder.”
- 2017** CIFAR Autism Workshop, Cambridge, MA
Session Chair, Neuroimaging approaches
“Revisiting core concepts in Autism with new tools”

- 2016 Society for Neuroscience, San Diego, CA
Gabard-Durnam, L.J., Fareri, D.S., Goff, B., Flannery, J., Gee, D.G., Caldera, C., Telzer, E., Humphreys, K.L., Shapiro, M., Tottenham, N. “Parental deprivation induced alterations in amygdala-cortical functional connectivity across human development as risk and resilience factors for concurrent and long-term internalizing symptomatology.”
- 2015 Brain Imaging Center Symposium, Icahn School of Medicine, Mt. Sinai, New York, NY
Gabard-Durnam, L.J.*, Gee, D.G.*, Goff, B., Flannery, J., Telzer, E., Humphreys, K., Lumian, D., Fareri, D.S., Caldera, C., Tottenham, N. “Stimulus-elicited connectivity influences future resting-state connectivity in development.”
- 2015 NY Social & Affective Neuroscience Gathering, New York, NY
Gabard-Durnam, L.J., & N. Tottenham. “Childhood as a sensitive period for human medial prefrontal cortex learning.”
- 2015 Society for Neuroscience, Chicago, IL
Gabard-Durnam, L.J., & N. Tottenham. “Childhood as a sensitive period for human medial prefrontal cortex learning.”
- 2015 Society for Research in Child Development, Philadelphia, PA
Gabard-Durnam, L.J., Gee, D.G., Goff, B., Flannery, J., Telzer, E., Humphreys, K., Lumian, D., Fareri, D.S., Caldera, C., Tottenham, N. “Resting-state amygdala-cortical circuit development and associations with previous experiences.”
- 2014 Society for Neuroscience, Washington, D.C.
Gabard-Durnam, L.J., Gee, D.G., Goff, B., Flannery, J., Telzer, E., Humphreys, K., Lumian, D., Fareri, D.S., Caldera, C., Tottenham, N. “Hebbian-like mechanism for human amygdala-mPFC network development.”
- 2013 Society for Neuroscience, San Diego, CA
Gabard-Durnam, L.J., Flannery, J., Goff, B., Gee, D., Telzer, E., Humphreys, K., Tottenham, N. “Development of resting-state amygdala-cortical connectivity.”

INTERNATIONAL/NATIONAL CONFERENCE SYMPOSIA

- 2022 FLUX Congress Career Development Panel (Paris, France)
 2021 FLUX Congress Flash Talks Session Chair (virtual)

SELECTED CONFERENCE PRESENTATIONS (of more than 50 to date)

* or ^ authors contributed equally

Undergraduate, post-baccalaureate, graduate, or post-doctoral mentee

** Mentee won award/travel scholarship for the presentation

McCormick, S.A., Underwood, E., Tao, A., Kim, I., Coffman, S., Nelson, C.A., Berde, C., Hensch, T.K., Cornelissen, L., **Gabard-Durnam, L.J. (July 2023). Visual development and face processing in U.S. infants exposed to GABA agonists. Flash talk presented at the International Society for Developmental Psychobiology Meeting.

Ghosh, P., Bosco, C., Zieff, M.R., Miles, M., Jacobs, C.A., Williams, S., Bradford, L., Davel, L., Knipe, C., Madi, Z., Mazubane, T., Methola, B., Mhlakwaphalwa, T., Mlandu, N., Nkubungu, K., Pan, T., Samuels, R., Williams, S.R., Donald, K.R., **Gabard-Durnam**, L.J. (September 2023). The spatio-temporal dynamics of EEG microstate network during three to twelve months of infancy. Poster presentation at the Flux Congress.

- McCormick, S.A., Bosco, C., Zieff, M.R., Miles, M., Jacobs, C.A., Williams, S., Bradford, L., Davel, L., Knipe, C., Madi, Z., Mazubane, T., Methola, B., Mhlawaphalwa, T., Mlandu, N., Nkubungu, K., Pan, T., Samuels, R., Williams, S., Fifer, W., Amso, D., Donald, K.A., & **Gabard-Durnam, L.J.** (September 2023). Neural activity during statistical learning and associations with household chaos. Poster presented at the FIT'NG Society Meeting.
- McCormick, S.A., Bosco, C., Zieff, M.R., Miles, M., Jacobs, C.A., Williams, S., Bradford, L., Davel, L., Knipe, C., Madi, Z., Mazubane, T., Methola, B., Mhlawaphalwa, T., Mlandu, N., Nkubungu, K., Pan, T., Samuels, R., Williams, S., Fifer, W., Amso, D., Donald, K.A., & **Gabard-Durnam, L.J.** (September 2023). Resting state neural activity in the first year of life and associations with household chaos. Poster presented at the Flux Congress.
- Kathios, N., Lopez, K. L., Davidow, J., **Gabard-Durnam, L. J.**, Loui, P. (September 2023). Leveraging novel music to examine age-related reward responses across development. Poster presentation at Flux Congress.
- Kathios, N.*, Lopez, K. L.*, **Gabard-Durnam, L. J.**[^], Loui, P.[^] (July 2023). Early life adversity reveals adaptive use of absorption in music. Poster presented at the International Society for Developmental Psychobiology Annual Meeting.
- Lopez, K. L.*, Kathios, N.*, **Gabard-Durnam, L. J.** (July 2023). The Predictability, Opportunity, and Safety Dimensions of Environmental Variability (POSDEV) Scale: A new measure to retrospectively measure positive early life experiences. Oral presentation at the International Society for Developmental Psychobiology Annual Meeting.
- Forest, T., McCormick, S., Amso, D., **Gabard-Durnam, L.J.** (2023) Maternal predictability in dyadic parent-infant interactions: a role for shaping the engagement of cortical learning and memory systems in early infancy. Association for Psychological Science. (symposium: Science of Learning).
- Kathios, N., **Gabard-Durnam**[^], L.J., Loui[^], P. (2023) Age-specific effects of music encoding on reward and memory systems in healthy and cognitively-impaired aging. Cognitive Neuroscience Society. San Francisco, CA.
- **Kathios, N., **Gabard-Durnam**[^], L.J., Loui[^], P. (2023) When you heard it first: neural substrates of the reminiscence bump in older adults. International Conference on Music Perception and Cognition. Japan.
- **Lopez*, K.L., Kathios*, N., **Gabard-Durnam**[^], L.J., Loui[^], P. (2023) Music@Home Retrospective: A new measure to assess early home music environments. International Conference on Music Perception and Cognition. Japan.
- **Kathios*, N., Lopez*, K.L., Loui[^], P., **Gabard-Durnam**[^], L.J. (2023) Early life experiences relate to current music usage and preference. (Oral presentation) International Conference on Music Perception and Cognition. Japan.
- **Lopez*, K.L., Kathios*, N., **Gabard-Durnam**[^], L.J., Loui[^], P. (2023) Effects of developmental adversity on adult music perception. (Oral presentation) International Conference on Music Perception and Cognition. Japan.
- McCormick, S., Underwood, E., Tao, A., Kim, I., Coffman, S., Nelson, C.A., Berde, C., Hensch, T.K.,

Cornelissen, L., **Gabard-Durnam**, L.J. (2023) Variation in Timing of Perceptual Narrowing for Faces in U.S. Infants Exposed to General Anesthesia. Society for Research in Child Development Biennial Meeting. Salt Lake City, UT. (flash talk)

Cline, T.L., Watrous, J., Nwakamma, M., Tinney, E., McDonald, K., Forfini, F., Raine, L., **Gabard-Durnam**, L.J., Kramer, A.F., Whitfield-Gabrieli, S., Hillman, C. (2023) Multivariate pattern analysis of childhood functional brain network connectivity after acute moderate-to-vigorous physical activity. American College of Sports Medicine. Denver, CO.

Zeiff, M., Monachino, A., Margolis, E., Miles, M., Madi, Z., Mhlakwaphalwa, T., Mlandu, N., Amso, D., Fifer, B., Donald, K., **Gabard-Durnam, L.J. (2022) Early exposure to intimate partner violence and salience network functional connectivity in South African infants over the first postnatal year. San Diego, CA
 ^ Selected for travel award and oral presentation from poster submissions

Lopera-Perez, D., Rockers, P., Leppänen, J., Evans, D., Coetzee, L., **Gabard-Durnam**, L.J., Tarullo, A. (2023) Head Circumference at Birth and Gender Predict EEG Relative Power in Resource-Poor Communities in South Africa. Society for Research in Child Development Biennial Meeting. Salt Lake City, UT. (paper symposium)

Zhong, D., Choy T., Flannery, J., Caldera, C., Goff, B., **Gabard-Durnam**, L., Humphreys, K., Gee, D., Telzer, E., Shapiro, M., Tottenham, N. (2023) Parental Interpersonal Ease Moderates Behavioral Problems following Early Previously-Institutional Care: A Longitudinal Study. Society for Research in Child Development Biennial Meeting. Salt Lake City, UT. (flash talk)

Lopez, K.L., Underwood, E., Tao, A., Nelson, C.A., Berde, C., Cornelissen, L., Hensch, T.K., **Gabard-Durnam**, L.J. (2021) Auditory sensitive period timing and language development in infants with prior general anesthetic drug exposure. International Society for Developmental Psychobiology, Chicago, IL

Monachino, A., Lopez, K., Pierce, L.J., **Gabard-Durnam**, L.J. (2021) The HAPPE plus event-related (HAPPE+ER) software: a standardized processing pipeline for event-related potential analyses. International Society for Developmental Psychobiology, Chicago, IL

Gabard-Durnam L.J., Hensch, T.K., Tager-Flusberg, H., Nelson, C.A. (2019) An EEG biomarker of language sensitive period disruption in Autism Spectrum Disorder. Poster presented at Frontiers in Autism Research Meeting, Massachusetts Institute of Technology, Cambridge, MA.

Gabard-Durnam, L.J., & N. Tottenham (2017) A childhood sensitive period for medial prefrontal cortex regulatory signal learning. Poster presented at Society for Research in Child Development Annual Meeting, Austin, TX.

Gabard-Durnam, L.J., & N. Tottenham (2016) Childhood as a sensitive period for human medial prefrontal cortex learning. Poster presented at early experience and sensitive periods in development workshop, Erice, Sicily.

Gabard-Durnam, L.J., & N. Tottenham (2016) Childhood as a sensitive period for human medial prefrontal cortex learning. Poster presented at Social and Affective Neuroscience Society Annual Meeting, New York, NY.

Kumar, A., Choy, T., **Gabard-Durnam**, L.J., Goff, B., Tottenham, N. (2015) Parental mediation of internalizing and externalizing problems for youth following early life stress. Poster presented at Stanford Undergraduate Psychology Conference, Stanford, CA.

Kumar, A., Choy, T., **Gabard-Durnam**, L.J., Goff, B., Tottenham, N. (2015) Parental mediation of

internalizing and externalizing problems for youth following early life stress. Poster presented at UCLA Science Poster Day, Los Angeles, CA.

Gabard-Durnam, L.J., Tottenham, N., Deoni, S., O’Muircheartaigh, J. Typical development of amygdala functional connectivity from 3 months to 4 years. (2015) Poster presented at Organization for Human Brain Mapping, Honolulu, HI.

VanTieghem, M.*, **Gabard-Durnam, L.***, Flannery, J., Goff, B., Gee D.G., Humphreys, K., Telzer, E., Caldera, C., Hare, T., and Tottenham, N. (2015) Effect of early adversity on emotional appraisals: Implications for amygdala-prefrontal circuit development. Poster presented at Society for Neuroscience, Chicago, IL.

VanTieghem, M.*, **Gabard-Durnam, L.***, Flannery, J., Goff, B., Gee D.G., Humphreys, K., Telzer, E., Caldera, C., Hare, T., and Tottenham, N. (2015) Effect of early adversity on emotional appraisals: Implications for amygdala-prefrontal circuit development. Poster presented at Association for Psychological Science, Boston, MA.

VanTieghem, M.*, **Gabard-Durnam, L.***, Flannery, J., Goff, B., Gee D.G., Humphreys, K., Telzer, E., Caldera, C., Hare, T., and Tottenham, N. (2015) Effect of early adversity on emotional appraisals: Implications for amygdala-prefrontal circuit development. Poster presented at Social and Affective Neuroscience Society Annual Meeting, Boston, MA.

Gee*, D.G., **Gabard-Durnam***, L., Telzer, E.H., Humphreys, K.L., Goff, B., Shapiro, M., Flannery, J., Lumian, D.S., Fareri, D.S., Caldera, C.J., Tottenham, N. (2015) Maternal buffering of human amygdala-prefrontal circuitry during childhood but not adolescence. Oral presentation at Social and Affective Neuroscience Society Annual Meeting, Boston, MA.

Gabard-Durnam, L.*, Gee, D.G.*, Goff, B., Flannery, J., Telzer, E., Humphreys, K., Lumian, D., Fareri, D.S., Caldera, C., Tottenham, N. (2014) A Hebbian-like mechanism for human amygdala-mPFC functional network development. Poster presented at New York Academy of Sciences Fifth Annual Aspen Brain Forum: Shaping the Developing Brain, New York, NY.

Gee, D.G.*, **Gabard-Durnam, L.***, Telzer, E.H., Humphreys, K.L., Goff, B., Shapiro, M., Flannery, J., Lumian, D.S., Fareri, D.S., Caldera, C., Tottenham, N. (2014) Maternal buffering of human amygdala-prefrontal circuitry during childhood. Poster presented at Society for Neuroscience, Washington, D.C.

VanTieghem, M.*, **Gabard-Durnam, L.***, Flannery, J., Goff, B., Gee, D., Telzer, E., Humphreys, K., Telzer, E., Caldera, C., Hare, T., Tottenham, N. (2014) Early life stress-induced bias towards positivity: Implications for amygdala-prefrontal circuit development. Poster presented at New York Academy of Sciences Fifth Annual Aspen Brain Forum: Shaping the Developing Brain, New York, NY.

Gabard-Durnam, L., Flannery, J., Goff, B., Gee, D., Telzer, E., Humphreys, K., Tottenham, N. (2013) Development of resting-state amygdala-cortical connectivity. Poster presented at Flux Conference, Pittsburgh, PA.

Gabard-Durnam, L., Flannery, J., Goff, B., Gee, D., Telzer, E., Humphreys, K., Tottenham, N. (2013) Development of amygdala-cortical connectivity at rest. Poster presented at Cognitive Neuroscience Society, San Francisco, CA.

Gabard-Durnam, L., Flannery, J., Goff, B., Gee, D., Telzer, E., Humphreys, K., Tottenham, N. (2012) Development of human amygdala-cortical functional connectivity. Maryland Neuroimaging Summer Institute, College Park, MD.

Gabard-Durnam, L., Tierney, A., Tager-Flusberg, H., Nelson, C. (2010) Patterns of hemisphere asymmetry in EEG activity in infants at high risk for autism. Poster presented at The International Meeting for Autism Research, Philadelphia, PA.

TEACHING

*New course created

*** PSYC 7250 Theories of Learning, Change, and Development (Graduate Seminar)**

Fall 2023 Teaching evaluations (93% response rate): Mean 5/5 (Dept mean 4.6/5)

*** PSYC 8402 Human Electroencephalography Methods (Graduate Methods)**

Spring 2023 Teaching evaluations not provided

*** PSYC 5140 Neuroplasticity Across the Lifespan (Graduate Proseminar)**

Fall 2022 Teaching evaluations (100% response rate): Mean 5/5 (Dept mean 4.6/5)

Spring 2022 Teaching evaluations (29% response rate): Mean 5/5 (Dept mean 4.5/5)

PSYC 4524 Cognitive Development (Undergraduate) In Person

Fall 2021 Teaching evaluations (78% response rate): Mean 4.9/5 (Dept mean 4.6/5)

*** PSYC 4524 Cognitive Development (Undergraduate) Online**

Spring 2021 Teaching evaluations (71% response rate): Mean 4.8/5 (Dept mean 4.6/5)

Guest Lectures:

2024 Bryn Mawr College, Developmental Psychology

2023 Northeastern University, Graduate Professional Development Course

2022 Harvard College, Molecular and Cellular Biology 145

2020 Northeastern University, Undergraduate Honors Research Methods

MENTORING

Postdoctoral Fellow Mentorship:

2023 - Priyanka Ghosh, Ph.D. (Northeastern University)

2022 - Sarah McCormick, Ph.D. (Northeastern University)

Future Faculty Fellowship Awardee

Doctoral Student Mentorship:

2022 - Kelsie L. Lopez (Northeastern University)

NSF GRFP Awardee, 2024 PhD Network

Outstanding Graduate Student Award: Teaching

2022 - Emma Margolis (Northeastern University)

2024 CCBH Fellow Awardee

2022 - Katherine Vincent (Northeastern University)

NSF GRFP Hon. Mention

2021 - Nickolas Kathios (Northeastern University)

NSF GRFP Awardee, 2024 PhD Network

Outstanding Graduate Student Award: Humanics

Additional Student Masters and Doctoral Committee Mentorship:

2024 - Michal Zieff (University of Capetown, South Africa), external mentor

2023 - Mark Nwakamma (Northeastern University)

2022 - Katherine Trice (Northeastern University)

- 2022 - Trevor Cline (Northeastern University)
- 2021 - 2024 Eileen Sullivan (Harvard University) PhD 2024
- 2022 - 2023 Lauren Grenata (Northeastern University) PhD 2023
- 2022 - 2023 Danlei Chen (Northeastern University) PhD 2023
- 2021 - 2023 Katherine McDonald (Northeastern University) PhD 2023
- 2020 - 2021 Yingzhao Zhou (Northeastern University) PhD 2021

Undergraduate Thesis Student Mentorship:

- 2024 - Oluwafunso Olaniyan (Northeastern University)
- 2022 - 2023 Ana Sobrino (Northeastern University)
Martinez Fellowship Awardee

Undergraduate Student Mentorship:

- 2023 - Oluwafunso Olaniyan (Northeastern University)
- 2023 - Janie Chang (Northeastern University)
- 2023 - Rishi Kudaravalli (Northeastern University)
- 2023 - Viti Gaonkar (Northeastern University)
- 2023 - Catherine Hommel (Northeastern University)
- 2023 - Maille Hagan (Northeastern University)
- 2023 - Saniya Burman (Northeastern University)
2024 PEAK Experience Awardee
- 2023 - Elena Lam (Northeastern University)
- 2023 - Fahim Ahmed (Harvard University)
- 2022 - Melany Morales (Northwestern University)
2023 APA SUPER Fellow at Northeastern University
2024 Goldwater Fellowship Awardee
- 2023 - 2023 Finn Janak (Northeastern University)
- 2023 - 2023 Jordan Bucenec (Northeastern University)
- 2021 - 2023 Ana Sobrino (Northeastern University) ***Martinez Fellowship Awardee***

Post-Baccalaureate Researcher Mentorship:

- 2023 - Cassandra Franke
- 2023 - Ana Sobrino
- 2022 - Josh Rodriguez
- 2021 - 2023 Cara Bosco (Harvard Medical School employee)
- 2021 - 2023 Mariane St.Juste (UMass Medical School student)
- 2021 - 2023 Isabelle Kim (University of Pennsylvania Social Work PhD program)
- 2020 - 2023 Alexa Monachino (U. of S. California Clinical Psychology PhD program) ***NSF GRFP Awardee***
- 2020 - 2022 Kelsie L. Lopez (Northeastern University Psychology PhD program) ***NSF GRFP Awardee***
- 2020 - 2021 Yueyue (Sapphire) Hou (McGill University Neuroscience PhD program)
- 2020 - 2021 Lindsay Benster (UCSD Clinical Psychology PhD program)
- 2019 - 2021 Fleming Peck (UCLA Neuroscience PhD program) ***NSF GRFP Awardee***
- 2018 - 2020 Ellen Underwood (New York University Medical School student)
- 2017 - 2019 Adriana Mendez-Leal (UCLA Developmental Psychology PhD program) ***NSF GRFP Awardee***
- 2017 - 2018 Alice Tao (Weill Cornell University Medical School student)

Mentoring Professional Development:

- 2021 PSY510 Mentoring Best Practices Summer Faculty Course, Princeton University

ACADEMIC SERVICE

Department/University Committees:

- 2023-2024 Faculty Search Committee, Psychology Department

2023	Psychology Department faculty merit committee (elected)
2023-	Cognitive and Brain Health Center Grants Committee
2023-	Cognitive and Brain Health Center Space Committee
2022-2023	Faculty Search Committee, Cognitive and Brain Health Center
2021-2022	Faculty Search Committee, Cognitive and Brain Health Center
2022	University Donation Campaign Launch Event
2021	Presentation to the Board of Trustees to launch Impact Engine Initiative

External National and International Service:

2023 -	Data Safety Monitoring Board member (PIs: Kasari & Tager-Flusberg)
2022 -	Wellcome Leap Foundation EEG Harmonization Committee, co-lead
2021 -	Healthy Brain and Child Development (HBCD) EEG Working Group, member
2021 -	HBCD subcommittee for EEG processing, member
2020 -	Gates Foundation Neuroimaging Consortium, EEG co-lead

Grant and Fellowship review:

2022, 2024	Northeastern University Tier 1 grant reviewer
2021 - 2022	NSF grant review panels
2016, 2019 -	Harvard-Cambridge Scholarship Selection Committee Member

Manuscript review:

I have served as an ad-hoc reviewer for a wide range of journals in multiple disciplines including:

General: *PLOS ONE, Scientific Reports*

Developmental Psychology: *Developmental Science, Child Development, Cognition*

Clinical Psychology: *Development and Psychopathology, NeuroImage: Clinical, Journal of Neurodevelopmental Disorders*

Psychiatry: *Translational Psychiatry, Biological Psychiatry*

Cognitive Neuroscience: *Social Cognitive & Affective Neuroscience, NeuroImage, Developmental Cognitive Neuroscience, NeuroReport, International Journal of Developmental Neuroscience, Behavioral and Brain Functions, Human Brain Mapping, Frontiers in Integrative Neuroscience*

Physiology: *Psychophysiology*

Professional Associations: Society for Research on Child Development, Association for Psychological Science, Society for Neuroscience, New York Academy of Sciences, Social and Affective Neuroscience Society, Organization for Human Brain Mapping, Cognitive Neuroscience Society, Eastern Psychological Association, International Society for Developmental Psychobiology, FLUX Congress, International Congress of Infant Studies, American Psychological Association

DIVERSITY, EQUITY, AND INCLUSION SERVICE

I prioritize service efforts to make psychology, neuroscience, and academia more broadly a supportive, inclusive environment.

2021 – 2022 **Application Statement Feedback Program (ASFP) Core Team** Applicant sub-team faculty, outreach program providing graduate school statement feedback to individuals from under-represented and marginalized communities applying to psychology PhD programs, helped recruit and coordinate 648 reviews from 184 statement editors for 272 applicants in 2021

2020 – **Resources for Researchers Website** I develop and curate content to demystify the hidden curriculum of academia and support individuals from marginalized communities in STEM. Content is featured in multiple professional development courses in psychology departments (including Yale, Harvard, UCLA, Michigan, and University of Connecticut).
<https://www.plasticityinneurodevelopmentlab.com/resourcesforresearchers>

2022: 29,982 site visits over 6 continents

2023: 42,000 site visits over 6 continents

- 2020 – **Navigating Academia Talk Series** lead 2 hour talks and question/answer sessions for individuals from under-represented and marginalized communities about navigating key transition points in academia (e.g. applying to PhD programs, applying to faculty positions)
- 2017 – 2019 **Harvard MEDscience speaker** high school program speaker series for students from under-represented and marginalized communities to explore STEM career options
- 2014 – 2015 **Columbia University STEM mentor**, panelist on navigating STEM education and careers for under-represented minority undergraduate students
- 2014 – 2015 **Columbia University Girls Science Day**, project leader for STEM outreach program for girls in elementary and middle schools

MEDIA COVERAGE

- 2023 Sensitive Periods Podcast: Applying to Graduate School
(1 hour interview highlighting my perspective and Resources for Researchers effort)
- 2023 Spectrum Launch: Demystifying academia with Laurel Gabard-Durnam
(profile of my DEI service efforts to the field)
<https://www.spectrumnews.org/news/spectrum-launch-demystifying-academia-with-laurel-gabard-durnam/>

Coverage of Law et al., 2023 has included 120 stories from 98 outlets, including:

- 2023 CNN Health via Madeline Holcombe “Your child’s academic success may start with their screen time as infants, study says”
- 2023 Good Morning America via Katie Kindelan “Excessive screen time during infancy may be linked to lower cognitive skills later in childhood”
- 2022 Medium NeuroTech coverage of HAPPE software for EEG
<https://medium.com/neurotechx/the-truth-about-brainwaves-mystic-monks-and-authenticity-in-science-4dfdb808cfe1>
- 2019 Spectrum News “Certain patterns of brain waves in babies may forecast Autism”
<https://www.spectrumnews.org/news/certain-patterns-of-brain-waves-in-babies-may-forecast-autism>