Arianna M. Gard - Curriculum Vitae

University of Maryland Biology-Psychology Building, 4094 Campus Drive, College Park, MD 20742 arigard@umd.edu

EDUCATION

2013 – 2019	PhD Developmental Psychology, University of Michigan
	Mentors: Luke W. Hyde, Christopher S. Monk, Vonnie C. McLoyd, Colter
	Mitchell

2006 – 2010 BA Psychology, Minor in Anthropology, University of California, Los Angeles

PROFESSIONAL APPOINTMENTS / EMPLOYMENT

2020 –	Assistant Professor of Developmental Psychology Faculty Affiliate, Program in Neuroscience and Cognitive Neuroscience Department of Psychology, University of Maryland College Park
2019 – 2020	Postdoctoral Fellow, Population Studies Center, University of Michigan NICHD T32 Trainee Mentor: Jeffery Morenoff

PUBLICATIONS

Refereed Journal Articles

- [15] Hyde, L.W.*, Gard, A.M.*, Tomlinson, R.C., Burt, S.A., Mitchell, C., & Monk, C.S. (in press) An ecological approach to understanding the developing brain: Examples linking poverty, parenting, neighborhoods, and the brain. *American Psychologist*. [*shared first author]
- [14] Gard, A. M., Hein, T. C., Mitchell, C., Brooks-Gunn, J., McLanahan, S., Monk, C. S., & Hyde, L.W. (in press). Prospective longitudinal effects of harsh parenting on corticolimbic function during adolescence. *Development and Psychopathology*
- [13] Gard, A. M., Maxwell, A. M., Shaw, D. S., McLanahan, S., Brooks-Gunn, J., Mitchell, C., Forbes, E. E., Monk, C. S., & Hyde, L. W. (in press). Beyond family-level adversities: Assessing the developmental timing of neighborhood disadvantage effects on the brain. *Developmental Science*
- [12] Gard, A. M., McLoyd, V. M., Mitchell, C., & Hyde, L. W. (2020). A longitudinal test of the Family Stress Model in the Fragile Families and Child Wellbeing Study. *Social Development, 29*(4), 1155-1175. https://doi.org/10.1111/sode.12446
- [11] Gard, A. M., Dotterer, H. L., & Hyde, L. W. (2019). Genetic influences on antisocial behavior: Recent advances and future directions. *Current Opinion in Psychology*, 27. doi:10.1016/j.copsyc.2018.07.013
- [10] Schmitz, L., Gard, A. M., & Ware, E. B. (2019). Genetic contributions to gender differences in smoking behavior and internalizing psychopathology. *American Journal of Medical Genetics Part B: Neuropsychiatric Genetics, 180B*:448–468. doi: 10.1002/ajmg.b.32748
- [9] Waller, R., Gard, A. M., Monk, C. S., Mitchell C., Bazzi, B., Sypher, I., Brooks-Gunn, J., McLanahan, S., & Hyde, L. W. (2019). The System for Coding Interactions and Family Functioning (SCIFF) in a representative low-income and urban sample of adolescents. *Psychological Assessment, 31*(8): 974-984. doi: 10.1037/pas0000719
- [8] **Gard, A.M.**, Shaw, D., Forbes, E.E., & Hyde, L.W. (2018). Amygdala reactivity as a marker of differential susceptibility to socioeconomic resources in emerging adulthood:

For better or for worse? *Developmental Psychology, 54*(12), 2341-2355. doi: 10.1037/dev0000600

- [7] Gard, A.M., Waller, R., Swartz, J., Shaw, D.S., Forbes, E.E., & Hyde, L.W. (2018). Amygdala functional connectivity during socioemotional processing prospectively predicts increases in internalizing symptoms in a sample of low-income, urban, young men. *Neuroimage, 178*: 562:573. doi: 10.1016/j.neuroimage.2018.05.079
- [6] Waller, R., Gard, A. M., Shaw, D. S., Forbes, E. E., Neumann, C. S., & Hyde, L. W. (2018). Weakened amygdala-vmPFC functional connectivity is related to psychopathic traits in low-income males during early adulthood. *Clinical Psychological Science*, 7(3) 628–635. doi:10.1177/2167702618810231
- [5] Gard, A. M., Waller, R. W., Shaw, D. S., Forbes, E. E., Winslow, E. B., Hariri, A. R., & Hyde, L. W. (2017). The long reach of early adversity: Parenting, stress, and neural pathways to antisocial behavior in adulthood. *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging*, 2(7): 582:590. doi: 10.1016/j.bpsc.2017.06.005
- [4] Hyde, L. W., Shaw, D. S., Murray, L., Gard, A., Hariri, A. R., & Forbes, E. E. (2016). Dissecting the role of amygdala reactivity in antisocial behavior in a sample of young, low-income, urban men. *Clinical Psychological Science*, 4(3): 527:544. doi: 10.1177/2167702615614511
- [3] **Gard, A. M.,** Owens, E. B., & Hinshaw, S. P. (2016). Prenatal smoke exposure predicts hyperactive/impulsive but not inattentive ADHD symptoms in adolescent and young adult girls. *Infant and Child Development, 25*(4): 339-351. doi:10.1002/icd.1943
- [2] Lavi, I., Gard, A. M., Hagan, M., Van Horn, P., & Lieberman, A. F. (2015). Child-Parent Psychotherapy Examined in a Perinatal Sample: Depression, Posttraumatic Stress Symptoms and Child-Rearing Attitudes. *Journal of Social and Clinical Psychology*, 34(1), 64-82, doi: 101521jscp201534164
- [1] Guendelman, M. D., Owens, E. B., Galán, C., **Gard, A.**, & Hinshaw, S. P. (2015). Earlyadult correlates of maltreatment in girls with attention-deficit/hyperactivity disorder: increased risk for internalizing symptoms and suicidality. *Development and Psychopathology*, 28(1), 1-14, doi: 10.1017/S0954579414001485

Manuscripts in Submission

- [2] Suarez, G. L., Burt, S. A., Gard, A. M., Klump, K. L., & Hyde, L.W. (under review). The Impact of Neighborhood Disadvantage on Amygdala Reactivity: Pathways Through Neighborhood Social Processes
- [1] **Gard, A. M.**, Ware, E. B., Hyde, L. W., Schmitz, L., Faul, J., & Mitchell, C. (under review). Assessing the structure and specificity of polygenic scores for psychiatric outcomes in a population-based cohort of older adults. *bioRxiv*, 601609.

Book Chapters

- [2] Gard, A. M., & Ware, E. B. (2020). Linking gene regions jointly with environment and depression. In Preedy, V. R. & Patel, V. B. (Eds.), The neuroscience of depression: Genetics, cell biology, neurology, behaviour and diet. Cambridge, MA: Academic Press.
- Lynn-Whaley, J., & Gard, A. (2012). The Neuroscience Behind Misbehavior: Reimagining How Schools Discipline Youth. Keeping Kids In School and Out of Courts, 26.

Manuscripts in Preparation

[6] Bakulski, K. M., Dou, J. F., Fisher, J., **Gard, A. M.**, Ware, E. B., & Mitchell, C. (in preparation). Particulate matter exposure in utero is associated with childhood saliva DNA methylation at ages 9 and 15.

- [5] Gard, A. M., Hyde, L. W., Morenoff, J., & Mitchell, C. (in preparation). Current methodological practices in human neuroimaging studies: A focus on sampling and representation. Pre-registration: <u>https://osf.io/6tpsh/</u>
- [4] Gard, A. M., James, S. A., McLanahan, S., Brooks-Gunn, J., Mitchell, C., Monk, C. S., & Hyde, L. W. (in preparation). Exposure to deadly gun violence and adolescent neurobehavioral outcomes.
- [3] Blumenthal, A. & **Gard, A. M.** (in preparation). Children's time use in the United States: Evidence from the 2014 Child Development Supplement of the Panel Study of Income Dynamics.
- [2] Gard, A. M., Stojanov, L.S., Klump, K., Burt, A. S., & Hyde, L.W. (in preparation). Unique effects of age and pubertal development on amygdala-PFC connectivity during socioemotional processing
- [1] Ware, E. B., Schmitz, L., Faul, J., **Gard**, A. M., Mitchell, C., ...& Kardia, S. L. Heterogeneity in polygenic scores for common human traits. *bioRxiv*, 106062

AWARDS, HONORS, AND FUNDING

2019	Rackham Candidacy Research Grant, University of Michigan
	Award Amount: \$3,000
2019	FLUX Society Travel Grant and Flash Talk
2019 – 2020	Population Studies Center NICHD T32 Fellowship, University of Michigan Award Amount: \$50,000 + health
2018 – 2019	Rackham Predoctoral Fellowship, University of Michigan
	Award Amount: \$32,000 + tuition
2018	Wisconsin Emotion Symposium Travel Award
2018	Pat Gurin Distinguished Speaker Award, University of Michigan
2017	Society for Research in Child Development Travel Award
2017	Institute for Social Research Libby Douvan Research Award
	Award Amount: \$5,000
2016 – 2017	Developmental Psychology NICHD T32 Training Grant Fellowship Award Amount:
2015	Fragile Families Data Workshop Travel Award
2015	Rackham Predoctoral Research Grant
	Award Amount: \$1,350
2015	Graduate Research Fellowship Honorable Mention, National Science
	Foundation
2014	Graduate Research Fellowship Honorable Mention, National Science
	Foundation

TEACHING EXPERIENCE

University of Michigan

Formal Course	es
2018	The Neurobiology of Psychopathology: A Biological Perspective on Mental Illness, Instructor of Record
2015	Advanced Research Methods in Developmental Psychology (Writing Intensive), Graduate Student Instructor
2015	Research Methods in Psychology (Writing Intensive), Graduate Student Instructor
2014	Introduction to Psychology, Graduate Student Instructor

Mentorship

<u>Project</u>: Associations between heart rate reactivity, harsh parenting, antisocial behavior, and callous-unemotional traits

- 2018 2020 Lara Stojanov, Post-baccalaureate lab manager <u>Project</u>: Longitudinal Associations Between Exposure to Community Violence, Attention Bias Towards Threat, and Internalizing Psychopathology
- 2017 2018 **Danielle Harrison**, Undergraduate Honors Student <u>Project</u>: Subjective and official reports of neighborhood danger and antisocial behavior in adolescence
- 2016 2017 Andrea Maxwell, Undergraduate Honors Student <u>Project</u>: Neighborhood effects on the brain: Impoverishment in early childhood predicts amygdala reactivity to ambiguous faces in young adulthood

CONFERENCE ACTIVITY

Panels Organized

- [3] Sample Size, Representation, or Both? Current Debates in Developmental Population Neuroscience. (2020). Annual meeting of the FLUX Society for Developmental Cognitive Neuroscience, Santa Rosa, CA, USA (virtual due to COVID-19 pandemic).
- [2] Genetic Effects on Health and Education Across the Life Course. (2019). Biannual Meeting of the Society for Research in Child Development (SRCD), Baltimore, MD, USA.
- [1] Cortisol, stress, and the brain: Implications for socioemotional behavior across development. (2017). Symposium presented at the biannual meeting of the Society for Research in Child Development (SRCD), Austin, TX, USA.

Papers Presented

- [13] Gard, A. M., James, S. A., McLanahan, S., Brooks-Gunn, J., Mitchell, C., Monk, C. S., & Hyde, L. W. (2020). Exposure to deadly gun violence and adolescent neurobehavioral outcomes. In Goosby, B. (chair): Expanding the diversity of biosocial research: Challenges and opportunities. Annual meeting of the American Sociological Association, San Francisco, CA, USA (virtual due to COVID-19 pandemic).
- [12] Gard, A. M., Hyde, L. W., Morenoff. J. D., & Mitchell, C. (2020). Current Methodological Practices in Human Neuroimaging Studies: A Consideration of Sampling. In Gard, A. M. (chair): Sample Size, Representation, or Both? Current Debates in Developmental Population Neuroscience. Annual meeting of the FLUX Society for Developmental Cognitive Neuroscience, Santa Rosa, CA, USA (virtual due to COVID-19 pandemic).
- [11] Gard, A. M., Maxwell, A. M., Shaw, D. S., Mitchell, C., Brooks-Gunn, J., McLanahan, S. S., Forbes, E. E., Monk, C. S., & Hyde, L. W. (2020). Beyond family-level adversities: Exploring the developmental timing of neighborhood effects on the brain. Paper to be presented at the Population Association of America Annual Meeting 2020, Washington, DC (cancelled due to COVID-19 pandemic).
- [10] **Gard, A. M.**, Burt, A., & Hyde, L.W. (2019). Unique effects of age and pubertal development on amygdala-PFC connectivity during face processing. Flash talk presented at the 2019 FLUX Society Conference, New York, NY, USA.
- [9] Gard, A. M., Ware, E. B., Hyde, L. W., Schmitz, L., Faul, J., Notterman, D., & Mitchell, C. (2019). Assessing the phenotypic and genetic structure of psychopathology across the life course. In Gard, A. M. (chair): Genetic Effects on Health and Education Across the Life Course. Biannual Meeting of the Society for Research in Child Development (SRCD), Baltimore, MD, USA.
- [8] Woods, A. D., **Gard, A. M.**, Ware, E. B., Notterman, D., & Mitchell, C. (2019). Using polygenic scores for educational attainment to probe genetic effects on schooling

outcomes among fragile families. Paper to be presented at the 2019 Annual Meeting of the Population Association of America, Austin, TX, USA.

- [7] **Gard, A. M.**, Ware E. B., Schmitz, L., Faul, J., & Mitchell, C. M. (2017). Using latent variables to uncover genetic main effects on psychopathology. Paper presented at the annual Integrating Genetics and the Social Sciences, Boulder, CO, USA.
- [6] Gard, A. M., Maxwell, A. M., Shaw, D. M., Forbes, E. E., & Hyde, L. W. (2017). Timing, mechanisms, and components of neighborhood effects on the brain. Flash talk presented at the annual FLUX Society for Developmental Cognitive Neuroscience, Portland, OR, USA.
- [5] Schmitz, L. L., Ware, E. B., & **Gard, A. M.** (2017). Genetic and Social Contributions to Gender-Cohort Differences in Smoking Behavior. Paper presented at the annual Population Association of American, Chicago, IL, USA.
- [4] Ware, E. B., Schmitz, L., Faul, J., Gard, A. M., Mitchell, C. M., Smith, J. A., & Zhao, W. (2017). Methods of Measurement: Implications of Polygenic Scores' Estimation Methods. Paper presented at the annual NIA-sponsored Biomarker Network Meeting, Chicago, IL, USA.
- [3] Hyde, L. W., Gard, A. M., Murray, L. M., Roberts, R. C., Waller, R., & Burt, S. A. (2017). Genetically informed neural approaches to understanding the development of antisocial behavior. In Jones, D.J. (chair): Advancements in research and practice with childhood externalizing problems. Symposium to be presented at the annual meeting of the American Psychological Association, Washington, DC, USA.
- [2] Gard, A. M., Waller, R., Shaw, D. S., Forbes, E. E., Hariri, A. R., Hyde, L. W. (2017). The long reach of early adversity: Parenting, stress, and neural pathways to crime and violence in adulthood. In Gard, A.M. (chair): Cortisol, stress, and the brain: Implications for socioemotional behavior across development. Symposium presented at the biannual meeting of the Society for Research in Child Development (SRCD), Austin, TX, USA.
- [1] Hyde, L. W., **Gard, A. M.**, Shaw, D. S., Forbes, E. E. (2016). Understanding neural markers of resilience: Amygdala reactivity as a marker of differential susceptibility. Paper presented at Society for Research in Adolescence, Baltimore, MD.

Posters Presented (first-author)

- [8] Gard, A.M., Hein, T.C., Mitchell, C.M., Brooks-Gunn, J., McLanahan, S.S., Monk, C.S., & Hyde L.W. (2019). Prospective longitudinal effects of harsh parenting on corticolimbic function during adolescence. Poster to be presented at the 2019 annual meeting of the International Society for Developmental Psychobiology, Chicago, IL, USA.
- [7] Gard, A. M., Hein, T. C., Mitchell, C. M., Lopez-Duran, N. L., Monk, C. S., & Hyde, L.W. (2018). Trajectories of parental harshness across childhood predict corticolimbic reactivity to emotional facial expressions in adolescence. Poster presented at the annual FLUX Society for Developmental Cognitive Neuroscience, Berlin, Germany.
- [6] Gard, A. M., Hein, T. C., Mitchell, C. M., Lopez-Duran, N. L., Monk, C. S., & Hyde, L.W. (2018). Trajectories of parental harshness across childhood predict corticolimbic reactivity to emotional facial expressions in adolescence. Poster presented at the Wisconsin Emotion Symposium, Madison, WI, USA.
- [5] Gard, A. M., Waller, R., Swartz, J., Shaw, D. S., Forbes, E. E., & Hyde, L.W. (2018). Amygdala functional connectivity during socioemotional processing prospectively predicts increases in internalizing symptoms in a sample of low-income, urban, young men. Poster to be presented at the Society for Philosophy and Psychology, Ann Arbor, MI, USA.
- [4] Gard, A. M., Shaw, D. S., Forbes, E. E., & Hyde, L. W. (2017). Amygdala reactivity as

a marker of differential susceptibility to socioeconomic resources: For better or for worse? Poster presented at the biannual annual meeting of the Society for Research in Child Development (SRCD), Austin, TX, USA.

- [3] **Gard, A. M.**, Shaw, D. S., Winslow, E. B., Forbes, E. E., Hyde, L. W. (2015). *CRHR1* variants interact with early childhood parenting to differentially predict amygdala reactivity to threat in young adulthood. Poster presented at the Society for Research in Child Development Biennial Meeting, Philadelphia, PA, USA.
- [2] Gard, A., Van Horn, P. & Lieberman, A. F. (2013). Maternal-fetal attachment offsets the risk for negative parenting attitudes in a sample of depressed pregnant women. Poster presented at the Biennial Meeting of the Society for Research in Child Development, Seattle, WA.
- [1] **Gard**, A., Owens, E. B. & Hinshaw, S. P. (2012). Prenatal smoke exposure predicts ADHD subtype longitudinally in a sample of girls. Poster session presented at the Transitions to Adulthood meeting of the Society for Research in Child Development, Tampa, FL.

UNIVERSITY & COMMUNITY SERVICE

Ad-Hoc Reviewer: Child and Family Youth Services, Neuroimage, Journal of Adolescence
Mentored Co-Reviewer: Developmental Psychology, Journal of Child
Psychology and Psychiatry, Neuroimage: Clinical
Consulting Editor, Journal of Research on Adolescence
Quantitative Faculty Hiring Committee, University of Michigan
Developmental Psychology Brown Bag Committee
Big Brothers Big Sisters Club of Washtenaw County, Mentor

SPECIALIZED TRAINING

Software/Programming

R Statistical Software, Mplus, SPSS, REDCap, MatLab, AFNI, Plink, Bash Command Line

Quantitative Methodology

Multilevel Modeling for Longitudinal Data – Wright Statistical Methods, Pittsburgh Geostatistics and Modeling of Spatial Data – University of Michigan, Ann Arbor Genomics for Social Scientists – University of Michigan, Ann Arbor Linear Growth Curve Modeling – University of North Carolina, Chapel Hill Statistical Genetics Workshop – Washington University St. Louis fMRI research methods and analysis – University of Michigan, Ann Arbor

Diversity, Equity, and Inclusion

Professional Development Diversity, Equity, and Inclusion Certificate Program – 2018 - 2020

PROFESSIONAL MEMBERSHIPS

Society for Research in Child Development Association for Psychological Science Population Association of America FLUX Society (*Developmental Cognitive Neuroscience*) National Council on Family Relations International Society for Developmental Psychobiology

I, Arianna Gard, certify that this CV is true and accurate as of 08.25.2020

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