**CURRICULUM VITAE**

Charles F. Geier, Ph.D.

**CONTACT INFORMATION**

229 Health and Human Development Building

Department of Human Development and Family Studies

College of Health and Human Development

The Pennsylvania State University

University Park, PA 16802

Phone: 814-865-1728

Email: cfg2@psu.edu

ORCID <http://orcid.org/0000-0001-5013-9543>

Scopus Author ID 16039536100

Google Scholar: <https://scholar.google.com/citations?user=GIravigAAAAJ&hl=en&oi=ao>

**PROFESSIONAL POSITIONS**

2022-current **Acting Assistant Dean for Graduate Education**, College of Health and Human Development, Pennsylvania State University

2021-2022 **Interim Director**, Social and Behavioral Neuroscience Dual-title Program

2020-current **Professor-in-Charge**, HDFS Graduate Program, Pennsylvania State University

2019-current **Co-Director**, Center for Brain, Behavior, and Cognition, Pennsylvania State University

2017-current **Associate Professor** (with tenure), Department of Human Development and Family Studies and Psychology, Pennsylvania State University

Affiliated Faculty: *Social Science Research Institute (SSRI) co-funded faculty; The Huck Institutes of the Life Sciences; Interdepartmental Graduate Program in Neuroscience; Edna Bennett Pierce Prevention Research Center; The Social, Life, and Engineering Sciences Imaging Center (SLEIC); The Center for the Brain Basis of Cognition (CBBC)*

2011-2017 **Assistant Professor**, Department of Human Development and Family Studies, Pennsylvania State University

Affiliated Faculty: *Social Science Research Institute (SSRI) co-funded faculty; The Huck Institutes of the Life Sciences; Interdepartmental Graduate Program in Neuroscience; Edna Bennett Pierce Prevention Research Center; The Social, Life, and Engineering Sciences Imaging Center (SLEIC); The Center for the Brain Basis of Cognition (CBBC)*

2010-2011 **Postdoctoral Scholar**

Cardiovascular Behavioral Medicine Research Training Program (T32 HL07560)

 Departments of Psychiatry, Medicine, and Psychology, University of Pittsburgh

 Mentors: Eric Donny, Ph.D. (primary mentor) and Stephen Manuck, Ph.D. (co-mentor)

2009-2010 **Postdoctoral Research Associate**

 University of Pittsburgh, Department of Psychology

 Eric Donny, Ph.D., Director, Addictive Behaviors Research Laboratory

2002-2003 **Visiting Instructor**, Department of Biological Sciences, Ohio Northern University

**EDUCATION**

* 1. Ph.D., Cognitive Psychology, Concentration in Cognitive Neuroscience

University of Pittsburgh and Center for the Neural Basis of Cognition (CNBC - University of Pittsburgh and Carnegie Mellon University)

Dissertation Title: “Incentive Processing and Inhibitory Control in Adolescents and Young Adults.” Advisor: Beatriz Luna, Ph.D.

2000-2002 M.S., Neuroscience

Ohio University, Athens OH

Thesis Title: “Modeling p1 (LP neuron) muscle force output in *Panulirus interruptus*” Advisor: Scott Hooper, Ph.D.

* 1. B.S., Biological Sciences (major), Psychology (minor), *cum laude*

Ohio University, Athens OH

**HONORS AND AWARDS**

2016-2019 Dr. Frances Keesler Graham Early Career Professorship in Developmental Neuroscience,

Social Science Research Institute, Penn State University

2010 Outstanding Poster Presentation - Post doc, Western Psychiatric Institute and Clinic Research Day, University of Pittsburgh, Department of Psychiatry

2007 Tim Post Award for Research Excellence, University of Pittsburgh, Developmental and Cognitive Psychology Graduate Programs

2004-2006 NSF Integrative Graduate Education Research and Training (IGERT) Fellowship (Mentors: James McClelland, Ph.D., Beatriz Luna, Ph.D.)

2001 Ohio University Graduate Student Travel Award

**GRANTS & RESEARCH SUPPORT**

(Note: grants to student trainees are separately listed under mentoring section)

2023 *Examining the Neural Basis of Habit Formation in Adolescents and Young Adults*

CSC Small Research Grant, Richard and Young Mi Hayes Child Study Center Director’s Fund, Penn State - $8800

 Role: Primary Investigator

2022-2024 *An Investigation of the Neurobiological Mechanisms Linking Social Stress and Tobacco Misuse*

 Enhancing External Funding with Internal Research Support (EEFIRS) Program, Penn State Department of Psychiatry and Behavioral Health - $60,000

 Role: Co-Investigator (Hobkirk, PI)

2022-2023 *Biobehavioral Trajectories of Social Anxiety from Early to Middle Adolescence*

 Diversity Supplement - National Institute of Mental Health R01 MH114974 (PI: Buss) - $181, 346

 Role: Co-Mentor (Ramos, PI)

2021-2024 *A Neurobiological Model of Anticipatory Anhedonia: The Association of Inflammation and Reward Circuitry Dysfunction in Treatment Resistant Depression*

Junior Faculty Research Scholar Award from the Commonwealth Universal Research Enhancement (CURE) Program – PA Tobacco Settlement Fund (TSF) - $382,490

Role: Primary Mentor and Co-Investigator (Mukherjee, PI), Lead on Neurocognitive and fMRI Aims

2021-2023 *Mitigating COVID-related Effects on NIH-Funded Longitudinal, Developmental Research*

 Social Science Research Institute, Penn State - $50,000

 Role: Co-Investigator (Scherf, PI)

2019-2022 *Empathy for Disparity: A Social-Cognitive Neuroscience Approach*

 Social Science Research Institute - $15,240

 Role: Co-Investigator (Cameron, PI) & Lead on Neurocognitive and fMRI Aims

2019-2021 *Neural and Biological Correlates of Anhedonia in Major Depressive Disorder: The Link Between Inflammation and Reward-Related Neural Circuits*

NIH UL1 TR002014 Penn State CTSI - $47,500

Role: Co-Investigator (Mukherjee, PI) & Lead on Neurocognitive and fMRI Aims

2018-2021 *Neural Correlates of Anhedonia in Major Depressive Disorder: The Link Between Inflammation*

*and Reward-Related Neural Circuits*

Junior Faculty Development Program, Penn State CTSI - $5,000

Role: Primary Mentor and Co-Investigator (Mukherjee, PI) & Lead on Neurocognitive and fMRI Aims

2017-2022 *Brain Mechanisms of Overeating in Children*

 National Institute of Diabetes and Digestive and Kidney Diseases, 1R01 DK110060-01A1 (NCE) - $2,778,991

 Role: Co-Investigator (Keller, PI)

2016-2022 *Using Serious Game Technology to Improve Sensitivity to Eye Gaze in Autism*

 National Institute for Mental Health, 1R61/R33 MH110624 (NCE) - $2,730,741

 Role: Co-Investigator (Scherf, PI)

2016-2020 *Effects of Cigarette Availability on Neural and Subjective Sensitivity to Rewards*

 National Institute for Drug Abuse, R01 DA041438-01 - $1,414,800

 Role: Co-Investigator (Wilson, PI)

2016-2019 *The Neurodevelopment of Habit Learning in Adolescents and Implications for Cigarette Smoking*

Dr. Frances Keesler Graham Early Career Professorship in Developmental Neuroscience

Social Science Research Institute, Penn State University - $61,859

Role: Principal Investigator

2015-2016 *Complex Interactions of Behavior, Genes, and Environment in the Multi-System Characterization of the Effects on Sleep Loss on Health, Cardio-metabolic Disease Risk, Cognition, and the Epigenome.*

 Penn State University Clinical and Translational Science Institute (CTSI) / funded by NIH

 Role: Co-Investigator (Buxton & Chang, co-PIs) & Lead on Neurocognitive and fMRI Aims

2015-2016 *Using Eye-tracking Technology to Enhance an Online Educational Game for Individuals with Autism*

 Center for Online Innovation in Learning (COIL) Research Initiation Grant, Penn State - $38,005

 Role: Co-Investigator (Scherf, PI)

2014-2016 *fMRI Neurofeedback and Decision-Making in Habitual Cigarette Smokers*

 National Cancer Institute, R21 CA1900931-01 - $150,000

 Role: Co-Investigator (Wilson, PI)

2014-2016 *Neurodevelopmental Changes Make Adolescents Inconsistent, Not Insane*

 Social Science Research Institute, Penn State - $7,850

 Role: Principal Investigator

2014-2015 *Illuminating the Neurocognitive Contributors to Nicotine Addiction and Relapse Among Adults with Attention Deficit Hyperactivity Disorder*

 Social Science Research Institute, Penn State - $19,950

 Role: Co-Investigator (Huang-Pollock, PI)

2013-2014 *Enhancing Smokers’ Control over Brain Reward Circuitry Using fMRI Neurofeedback*

Social Science Research Institute and Milton S. Hershey Cancer Institute, Penn State - $46,100

Role: Co-Investigator (Wilson, PI)

2012-2014 *Examining the Influence of Incentives on Inhibitory Control in Late Adolescent and Adult Smokers*

Social Science Research Institute and Milton S. Hershey Cancer Institute, Penn State - $43,950

 Role: Principal Investigator

**PUBLICATIONS**

**\*\***Denotes HDFS graduate student working under my supervision

† Denotes graduate student from another department training in my lab

**Underlined name** = senior authorship, indicative of concept development, organization, guidance, and supervision of research project and paper

*Under Review*

|  |  |
| --- | --- |
| 1. | Park, J.J., \*\*Petrie, D., Fisher, Z., Chow, S., **Geier, C.F**., & Molenaar, P.C.M. (Under review). On Subgrouping Continuous Processes in Discrete Time. *Multivariate Behavioral Research*, Submitted June 2022 |
| 2. | Fisher, Z.F., Kim, Y., Pipiras, V., \*\*Petrie, D., & **Geier, C.F**. (Revise and Resubmit). Structured Penalization of Heterogeneous Time Series. *Multivariate Behavioral Research*,Submitted June 2022 |
| 3. | Keller, K., Pearce, A.L., Fuchs, B., Hallisky, K., Rolls, B.J., Wilson, S.J., **Geier, C.F**., & Rose, E.J. (Revise and Resubmit). Children with lower ratings of executive functions have a greater response to the portion size effect. *Appetite*Submitted Dec. 2022 |
| 4. | Pearce, A.L., Hallisky, K., Rolls, B.J., Wilson, S.J., Rose, E., **Geier, C.F.**, Garavan, H., &. Keller, K.L. (Under review). Children at high familial risk for obesity show deficits in executive functioning prior to the development of excess weight status.  |
| 5. | † Gunther, K.E., Keding, T.J., \*\*Petrie, D., Pérez-Edgar, K., **Geier, C.F.**, & Gee, D.G. Characterizing resting state frontoparietal-amygdala network connectivity as a potential moderator of the developmental link between executive functioning and internalizing symptoms: A GIMME-based approach. Registered Report submitted to *Biological Psychiatry* |

*Published or in press*

|  |  |
| --- | --- |
| 46. | Chung, Y.I., \*\*White, R., **Geier, C.F**., Johnston, S.J., Smyth, J.M., McKee, S.A., & Wilson, S.J. (In press) Testing the efficacy of real-time fMRI neurofeedback for training people who smoke daily to upregulate neural responses to nondrug rewards. *Cognitive, Affective, and Behavioral Neuroscience* |
| 45. | † Gunther, K.E., \*\*Petrie, D., Pérez-Edgar, K. & **Geier, C.F**. (In Press). Relations between executive functioning and internalizing symptoms vary as a function of frontoparietal-amygdala resting state connectivity. *Research on Child and Adolescent Psychopathology.*  |
| 44. | † Gunther, K.E., \*\*Petrie, D., Pearce, A.L., Fuchs, B., Pérez-Edgar, K., Keller, K.L., & **Geier, C.F**. (2022). Heterogeneity in fronto-amygdala connectivity in middle childhood and concurrent interrelations with inhibitory control and anxiety symptomology. *Neuropsychologia, 174*(2): 108313 |
| 43. | Laskowitz, S., Griffin, J.W., **Geier, C.F.**, & Scherf, K.S. (2022). Cracking the code of live human social interaction in autism: A review of the eye-tracking literature. *Proceedings of Machine Learning Research, 173,* 242-264. |
| 42. | \*\*Petrie, D., Chow, S. & **Geier, C.F.** (2021). Effective Connectivity During an Avoidance-based Pavlovian-to-Instrumental Transfer Task. *Brain Sciences* *11*(11), 1472. <https://doi.org/10.3390/brainsci11111472>  |
| 41. | Griffin, J.W., **Geier, C.F.**, Smyth, J.M., & Scherf, K.S. (2021) Improving sensitivity to eye gaze cues in autistic adolescents using series game technology: A randomized control trial. *Journal of Child Psychology and Psychiatry Advances* <http://doi.org/10.1002/jcv2.12041>  |
| 40. | † Adise, S., White, C.N., \*\*Roberts, N.J., **Geier, C.F**., & Keller, K.L. (2021) Children’s inhibitory control abilities in the presence of rewards are related to weight status and eating in the absence of hunger. *Appetite, 128,* 167-179. |
| 39. | Fuchs, B., \*\*Roberts, N.J., † Adise, S., Pearce, A., **Geier, C.F.,** White, C., Oravecz, Z., & Keller, K.L. (2021) Decision-making processes related to perseveration are indirectly associated with weight status in children through laboratory assessed energy intake. *Frontiers Psychology.* doi:10.3389/fpsyg.2021.652595 |
| 38. | Frank, J.L., Broderick, P., Oh, Y., Mitra, J., Schussler, D., Kohler, K., **Geier, C.F.,** Berrena, E., Mahfouz, J., Levitan, J., Roeser, R., & Greenberg, M. (2021) The Effectiveness of a Teacher Delivered Mindfulness-Based Curriculum on Adolescents’ Social-Emotional and Executive Functioning. *Mindfulness.* doi.org/10.1007/s12671-021-01594-9 |
| 37. | Griffin, J.W., **Geier, C.F.,** Smyth, J.M., & Scherf, K.S. (2020) Improving the ability to interpret eye gaze cues in autistic adolescents: A serious game intervention. *Journal of Vision, 20(11),* 1346. |
| 36. | Chaby, L., Lasseter, H.C., **Geier, C.F.**, & Jeromin, A. (2020) Determining risk for stress-linked psychiatric illness following adolescent stress exposure. *Current Opinions in Behavioral Sciences, 36,* 79-89. |
| 35. | Kling, S.M., Pearce, A.L., Reynolds, M., Garavan, H., **Geier, C.F.**, Rolls, B.J., Rose, E.J., Wilson, S.J., & Keller, K.L. (2020) Development and Pilot Testing of Standardized Food Images for Studying Eating Behaviors in Children. *Frontiers in Psychology.* http://doi.org/10.3389/fpsyg.2020.01729. |
| 34. | Pearce, A.L., † Adise, S., \*\*Roberts, N.J., White, C., **Geier, C.F.**, & Keller, K.L. (2020) Individual Differences in the Influence of Taste and Health Impact Successful Dietary Self-Control: A Mouse Tracking Food Choice Study in Children. *Physiology & Behavior, 223,* 112990 |
| 33. | \*\*Roberts, N., Oravecz, Z., Sprague, B., & **Geier, C.F**. (2019) A Novel Hierarchical LATER Process Model: Evaluating Latent Sources of Variation in Reaction Times of Adult Daily Smokers. *Frontiers in Psychiatry, 10,* 474 (online). |
| 32. | † Adise, S., **Geier, C.F.,** \*\*Roberts, N.J., White, C.N., & Keller, K.L. (2019) Food or Money? Children’s brains respond differently to the anticipation of rewards regardless of weight status. *Pediatric Obesity, 14(2).* E12469 |
| 31. | Scherf, K.S., Griffin, J., Judy, B., Whyte, E., **Geier, C.F.,** Elbich, D., & Smyth, J.M. (2018) Improving sensitivity to eye gaze cues in autism using serious game technology: Study protocol for a Phase I randomized controlled trial. *BMJ Open, 8(9).* E023682 |
| 30. | † Adise, S., **Geier, C.F.,** \*\*Roberts, N.J., White, C.N., & Keller, K.L. (2018). Is brain response to food rewards related to overeating? A test of the reward surfeit model of overeating in children. *Appetite, 128,* 167-179.  |
| 29. | **Geier, C.F., \*\***Roberts, N., & **\*\***Lydon, D.M. (2018). The effects of smoking abstinence on incentivized spatial working memory, *Substance Use & Misuse, 53(1),* 86-93.  |
| 28. | Hallquist, M., **Geier, C.F.,** & Luna, B. (2018) Incentives facilitate developmental improvements in inhibitory control by modulating control-related networks, *NeuroImage, 172,* 369-380.  |
| 27. | MacLean, R.R., Pincus, A.L., Smyth, J.M., **Geier, C.F.,** & Wilson, S.J. (2017). Extending the balloon analogue risk task to assess naturalistic risk taking via a mobile platform. *Journal of Psychopathology and Behavioral Assessment,* 1-10. https://doi.org/10.1007/s10862-017-9628-4.  |
| 26. | **\*\***Lydon, D. & **Geier, C.F.** (2017). Age-varying associations between sensation seeking, impulse control, and daily cigarette smoking during adolescence and young adulthood. *Journal of Research on Adolescence, 28(2),* 354-367. |
| 25. | Hawes, S.W., Chahal, R., Hallquist, M.N., Paulsen, D.J., **Geier, C.F.**, & Luna, B. (2017). Modulation of Reward-Related Neural Activation on Sensation Seeking Across Development, *NeuroImage, 147,* 763-771. |
| 24. | **\*\***Lydon, D.M., Ram, N., Conroy, D.E., Pincus, A.L., **Geier, C.F**., & Maggs, J.L. (2016). The within-person associations between alcohol use and sleep duration and quality *in situ:* An experience sampling study. *Addictive Behaviors*, *61,* 68-73.  |
| 23. | Sweitzer, M.M., **Geier, C.F.**, Denlinger, R., McClernon, F.J., Addicott, M.A., Raiff, B.R., Dallery, J., & Donny, E.C. (2016) Smoking abstinence-induced changes in resting state functional connectivity with ventral striatum predict lapse during a quit attempt. *Neuropsychopharmacology, 41(10),* 2521-2529.  |
| 22. | Sweitzer, M.M., **Geier, C.F.**, Denlinger, R., Forbes, E., Raiff, B., Dallery, J., McClernon, F.J., & Donny, E.C. (2016). Blunted striatal response to monetary reward anticipation during smoking abstinence predicts lapse during a contingency management-supported quit attempt. *Psychopharmacology, 233(5),* 751-760. |
| 21. | Chung, T., Paulsen, D., **Geier, C.F.**, Luna, B., & Clark, D.B. (2015). Regional brain activation supporting cognitive control in the context of reward is associated with treated adolescents’ marijuana problem severity at follow-up: A Preliminary Study. *Developmental Cognitive Neuroscience*, *16,* 93-100.  |
| 20. | **\*\***Lydon, D.**,** Howard, M., Wilson, S.J., & **Geier, C.F.** (2015). The perceived causal structure of smoking: Smoker and non-smoker comparisons. *Journal of Health Psychology, 21(9),* 2042-2051. DOI: 10.1177/1359105315569895 |
| 19. | **\*\***Lydon, D., \*\*Roberts, N., & **Geier, C.F.** (2015). Reduced influenced of monetary incentives on Go/No-Go performance during smoking abstinence. *Nicotine and Tobacco Research, 17(9),* 1178-1181. DOI: 10.1093/ntr/ntu283.  |
| 18. | Paulson, D., Hallquist, M., **Geier, C.F**., & Luna, B. (2015). Effects of Incentives, Age, and Behavior on Brain Activation During Inhibitory Control: A Longitudinal fMRI Study. *Developmental Cognitive Neuroscience, 11,* 105-115. DOI: 10.1016/j.dcn.2014.09.003.  |
| 17. | Zhai, Z., Pajtek, S., Luna, B., **Geier, C.F.**, Ridenour, T., & Clark, D. (2014). Reward Modulated Response Inhibition, Cognitive Shifting and the Orbital Frontal Cortex in Early Adolescence. *Journal of Research on Adolescence, 25(4),* 753-764. DOI: 10.1111/jora.12168.  |
| 16. | **\*\***Lydon, D., Wilson, S.J., **\*\***Childs, A., & **Geier, C.F.** (2014). Adolescent Nicotine Dependence: What we know and where we are headed. *Neuroscience and Biobehavioral Reviews, 45,* 323-342. http://dx.doi.org/10.1016/j.neurobiorev.2014.07.003 |
| 15. | **Geier, C.F.,** Sweitzer, M., Denlinger, R., Sparacino, G., & Donny, E. (2014). Abstinent Adult Daily Smokers Show Reduced Anticipatory but Elevated Saccade-related Brain Responses During a Rewarded Antisaccade Task. *Psychiatry Research: Neuroimaging, 223(2),* 140-147.DOI: 10.1016/j.pscychresns.2014.04.007 |
| 14. | Sweitzer, M.M., **Geier, C.F.,** Joel, D., Denlinger, R., Donny, E. (2013). Dissociated Effects of Anticipating Smoking Versus Monetary Reward in the Caudate as a Function of Smoking Abstinence. *Biological Psychiatry, 223,* 140-147*.*DOI: 10.1016/j.biopsych.2013.11.013  |
| 13. | MacLean, R., **Geier, C.F**., Henry, S.L., & Wilson, S.J. (2013). Digital Peer Interactions Affect Risk Taking in Young Adults: A Preliminary Study. *Journal of Research on Adolescence, 24(4),* 772-780*.* DOI: 10.1111/jora.12093 |
| 12. | **Geier, C.F**. (2013). Adolescent Cognitive Control and Reward Processing: Implications for Risk Taking and Substance Use. *Hormones and Behavior, 64(2),* 333-342.  |
| 11. | Luna, B., Paulsen, D., Padmanabhan, A., & **Geier, C.F.** (2013). Cognitive Control and Motivation. *Current Directions in Psychological Science, 22 (2),* 94-100.  |
| 10. | Weaver, M.T., **Geier, C.F.**, Levin, M.E, Caggiula, A.R., Sved, A.F., Donny, E. (2012) Adolescent Exposure to Nicotine Results in Reinforcement Enhancement but does not Affect Adult Responding in Rats. *Drug and Alcohol Dependence, 125(3),* 307-312. |
| 9. | **Geier, C.F.** & Luna, B. (2012) Developmental Effects of Incentives on Response Inhibition. *Child Development, 83(4),* 1262-1274.  |
| 8. | Padmanabhan, A., **Geier, C.F.**, Ordaz, S., Teslovich, T., & Luna, B. (2011) Developmental Changes in Brain Function Underlying the Influence of Reward Processing on Inhibitory Control. *Developmental Cognitive Neuroscience, 1(4),* 517-529.  |
| 7. | Chung, T., **Geier, C.F**., Luna, B., Pajtek, S., Terwilliger, R., Thatcher, D., & Clark, D. (2011) Enhancing Response Inhibition by Incentive: Comparison of adolescents with and without substance use disorder. *Drug and Alcohol Dependence, 115(1-2),* 43-50. |
| 6. | Luna, B., Velanova, K., & **Geier, C.F.** (2010) Methodological Approaches in Developmental Neuroimaging Studies. *Human Brain Mapping, 31,* 863-871. |
| 5. | **Geier, C.F.**, Terwilliger, R., Teslovich, T., Velanova, K., Luna, B. (2010) Immaturities in Reward Processing and its Influence on Inhibitory Control in Adolescence. *Cerebral Cortex, 20(7)*, 1613-29.  |
| 4. | **Geier, C.F**. & Luna, B. (2009) The Maturation of Incentive Processing and Cognitive Control. *Pharmacology, Biochemistry, and Behavior*, *93(3),* 212-221 |
| 3. | **Geier, C.F.**, Garver, K.E., Terwilliger, R., & Luna, B. (2009) The Development of Working Memory Maintenance. *Journal of Neurophysiology,* *101(1),* 84-99. |
| 2. | Luna, B., Velanova, K., & **Geier, C.F.** (2008*)* Development of Eye Movement Control. *Brain & Cognition, 68(3),* 293-308. |
| 1. | **Geier, C.F**., Garver, K.E., & Luna, B. (2007) Circuitry Underlying Temporally Extended Spatial Working Memory. *NeuroImage, 35,* 904-915.  |

*Book Chapters*

|  |  |
| --- | --- |
| 4. | \*\*Rock, J.A., **Geier, C.F.,** Noll, J.G., & De Bellis, M.D. (2018) Developmental Traumatology: Brain Development and Maltreated Children with and without PTSD. Jennie G. Noll (Ed.). *The Biology of Early Life Stress: Understanding Child Maltreatment and Trauma.* Springer.  |
| 3. | **\*\***Lydon. D., Galvan, A., & **Geier, C.F**. (2015) Adolescents and addiction: Vulnerabilities, opportunities, and the role of brain development. S.J. Wilson (Ed.), *The Wiley-Blackwell Handbook on the Cognitive Neuroscience of Addiction.* Oxford, UK: Wiley-Blackwell.  |
| 2. | Luna, B., Padmanabhan, A., & **Geier, C.F.** (2013) The Adolescent Sensation Seeking Period: Development of Reward Processing and its Effects on Cognitive Control. In V. Reyna and V. Zayas (Eds.), The Neuroscience of Risky Decision Making. Washington, DC; American Psychological Association. |
| 1. | **Geier, C.F.,** Padmanabhan, A., & Luna, B. (2012) Immaturities in Incentive Processing and Executive Function in Adolescence. In T. Palomo, R.M., Kostrzewa, R.J. Beninger (Eds.), *Staging Neuropsychiatric Disorders: Etiopathogenesis and Treatment.* (pp.297-308). Springer.  |

*Open Science – Preprints and Registered Reports*

|  |  |
| --- | --- |
| 1. | Chung, Y.I., \*\*White, R., **Geier, C.F**., Johnston, S.J., Smyth, J.M., McKee, S.A., & Wilson, S.J. (2022, August 9). Testing the efficacy of real-time fMRI neurofeedback for training people who smoke daily to upregulate neural responses to nondrug rewards. <https://doi.org/10.31234/osf.io/5ntvs>(\*Accepted for publication – see #46 above) |
| 2. | Gunther, K., Petrie, D., Pearce, A., Fuchs, B., Perez-Edgar, K., Keller, K., & **Geier, C**. (2022, January 12). Heterogeneity in PFC-amygdala connectivity in middle childhood, and concurrent interrelations with inhibitory control and anxiety symptomology. <https://doi.org/10.31234/osf.io/wcknj> (\*Accepted for publication – see #44 above) |
| 3. | Petrie, D., Chow, S., & **Geier, C.** (2021, August 12). Effective Connectivity During an Avoidance-Based Pavlovian-to-Instrumental Transfer Task. <https://doi.org/10.31234/osf.io/kq3be> (\*Accepted for publication - see #42 above) |
| 4. | † Gunther, K.E., Keding, T.J., \*\*Petrie, D., Pérez-Edgar, K., **Geier, C.F.**, & Gee, D.G. (Under review – see above) Characterizing resting state frontoparietal-amygdala network connectivity as a potential moderator of the developmental link between executive functioning and internalizing symptoms: A GIMME-based approach. Registered Report submitted to *Biological Psychiatry* |

*Articles in Preparation*

|  |  |
| --- | --- |
| 1. | Fisher, Z., Hunter, M., & **Geier, C.F.** (in preparation) What ergodicity means for you  |
| 2. | **Geier, C.F.** (in preparation). Revisiting the Developmental Effects on Incentives on Antisaccade Performance  |
| 3. | **Geier, C.F., \*\***Petrie, D., **\*\***Roberts, N., & Lydon-Staley, D.M. (in preparation). Functional connectivity differences in abstinent vs. non-abstinent daily smokers.  |
| 4. | \*\*Petrie, D. & **Geier, C.F.** (in preparation). The development of habits during adolescence: A Review |
| 5. | **Geier, C.F.,** \*\*Petrie, D., & \*\*Roberts, N. (in preparation). Adolescents and Adult Habit Neurocircuitry: Results from an Outcome Devaluation Task  |
| 6. | Other on-going projects/manuscripts in prep:) Nutrition task fMRI (Roberts, Adise, Keller, **Geier**), Neurocircuitry of Compassion (Scheffer, **Geier**, & Cameron), Peripheral Inflammation and Reward Processing in Major Depressive Disorder (Mukherjee & **Geier**), Rewarded Inhibitory Control in Persons on the Autism Spectrum (K. Unruh, **Geier**) |
|  |  |

**CONFERENCE PRESENTATIONS**

**\*\***Denotes HDFS graduate student working under my supervision

† Denotes graduate student from another department training in my lab

|  |  |
| --- | --- |
| 66. | Keller, K.L., Pearce, A.L., Fuchs, B., Rolls, B.J., Wilson, S., Rose, E., **Geier, C.F.,** & Garavan, H. (2022). Children with lower executive functioning have a greater response to the portion size effect. Talk presented at the annual meeting of the Society for the Study of Ingestive Behaviors, Porto, Portugal.  |
| 65. | Pearce, A.L., Fuchs, B., Rolls, B.J., Wilson, S., Rose, E., **Geier, C.F.,** Garavan, H., & Keller, K.L. (2022). Susceptibility to the Portion Size Effect at a Mixed Meal Differed by Familial Risk for Obesity. Poster presented at the annual meeting of the Society for the Study of Ingestive Behaviors, Porto, Portugal.  |
| 64. | † Gunther, K., \*\*Petrie, D., Perez-Edgar, K., & **Geier, C.F**. (2022). Relations between executive functioning and internalizing symptoms vary as a function of frontoparietal-amygdala resting state connectivity. Poster presentation at the International Congress for Developmental Cognitive Neuroscience (Flux) – Paris, France |
| 63.  | \*\*Petrie, D., Fisher, Z., & **Geier, C.F.** (2022). Examining the influence of training on the balance between goal-directed and habitual control using time-varying GAM models in adolescents and young adults. Poster presentation at the International Congress for Developmental Cognitive Neuroscience (Flux) – Paris, France |
| 62. | Mukherjee, D., Marr, N., & **Geier, C.F**. (2022). Anticipatory Anhedonia and Neural Deficits in Major Depressive Disorder. Society of Biological Psychiatry.  |
| 61. | \*\*Petrie, D., Chow, S-M., & **Geier, C.F.** (2021). Effective Connectivity During an Avoidance-based Pavlovian-to-Instrumental Transfer Task. Poster presentation at the International Congress for Developmental Cognitive Neuroscience (Flux) - Online |
| 60. | Reigh, N.A., Pearce, A.L., Garavan, H., **Geier, C.F**., Rolls, B.J., Rose, E., Wilson, S.J., & Keller, K.L. (2021). Association between state-based and trait-based responsiveness to satiety cues differs by child risk for overweight/obesity American Society for Nutrition Annual Conference. - Online |
| 59. | † Gunther, K.E., \*\*Petrie, D., Pearce, A.L., Fuchs, B., Keller, K.L., & **Geier, C.F.** (2020). Examining inhibitory control as a moderator between childhood resting state fronto-limbic connectivity and anxiety. Poster presentation at the International Congress for Developmental Cognitive Neuroscience (Flux) - Online |
| 58. | \*\*Petrie, D. & **Geier, C.F.** (2020). Pavlovian-to-instrumental transfer and outcome devaluation: A cross-validation study of tasks assessing the interplay between goal-directed and habitual responding in adolescents and young adults. Poster presentation at the International Congress for Developmental Cognitive Neuroscience (Flux) – Online |
| 57. | Fuchs, B., \*\*Roberts, N.J., † Adise, S., Pearce, A., **Geier, C.F.**, White, C., Oravecz, Z., & Keller, K.L. (2020). Decision-making Processes in Children are Associated with the Tendency to Overeat in the Laboratory. The Obesity Society Annual Meeting 2020. - Online |
| 56. | Pearce, A. P., Garavan, H., **Geier, C.F.,** Rose, E., Rolls, B.J., Wilson, S., and Keller, K. L. (2020) Stuck in a Rut? Children with inflexible reinforcement learning show greater hedonic overconsumption. The Obesity Society Annual Meeting 2020. - Online |
| 55. | Neuwald, N., Fearnbach, S.N., Garavan, H., **Geier, C.F.**, Rolls, B.J., Rose, E., Wilson, S.J., & Keller, K.L. (2020). Hedonic Eating Predicts Fat Mass in Healthy-weight Children at Low Familial Risk for Obesity. The Obesity Society Annual Meeting 2020. - Online |
| 54. | Mukherjee, D., **Geier, C.F.,** Engeland, C., Auer, B., Majd, M., & Saunders, E.F.H. (2019). Neurobiological Correlates of Anhedonia in Major Depressive Disorder: The Link Between Inflammation and Reward-Related Neural Circuits. Poster presented for Junior Faculty Development Program at Penn State Hershey Medical Center.  |
| 53. | \*\*Petrie, D., Fry, C., \*\*Roberts, N.J., Gatzke-Kopp, L., & **Geier, C.F.** (2019). Examining How Context and Affect Influence Motivated Cognitive Control Across Development. Poster presentation at the International Congress for Developmental Cognitive Neuroscience (Flux): New York. |
| 52. | **Geier, C.F.,** \*\*Petrie, D., & \*\*Roberts, N.J. (2019). Examining the Neurocircuitry of Habits in Adolescents and Young Adults. Poster presentation at the International Congress for Developmental Cognitive Neuroscience (Flux): New York. *Presenter* |
| 51. | \*\*Petrie, D., Ryan, R., \*\*Roberts, N.J., Gatzke-Kopp, L., & **Geier, C.F.** (2018) Examining the Effects of Social-emotional Contexts on Rewarded Antisaccade Task Performance. Poster presentation at the International Congress for Developmental Cognitive Neuroscience (Flux): Berlin, Germany  |
| 50. | \*\*Roberts, N.J., † Adise, S., Keller, K., & **Geier, C. F.** (2018) The Anticipation of Varying Reward Types in Healthy Weight and Overweight Adolescents*.*Poster presentation at the International Congress for Developmental Cognitive Neuroscience (Flux): Berlin, Germany  |
| 49. | \*\*Roberts, N. J., Oravecz, Z., & **Geier, C. F**. (2018) The Application of Cognitive Reinforcement Learning Models to Further our Understanding of Risky Decision-Making across Development. Oral presentation at the HDFS Graduate Research Symposium: The Pennsylvania State University. |
| 48. | \*\*Roberts, N. J., Haagen, D., † Adise, S., Keller, K. K., & **Geier, C. F**. (2017) Examining Differences in Healthy Weight vs. Overweight Adolescents in the Anticipation of Reward. Poster presentation at The Society for Neuroscience: Washington, D.C. |
| 47. | † Adise, S., **Geier, C. F**., \*\*Roberts, N. J., White, C. N., & Keller, K. L. (2017) Differences in brain response to anticipation and receipt for food and money rewards predicts children’s intake of savory foods served at a highly palatable buffet meal. Oral presentation at The Society for Neuroscience: Washington, D.C. |
| 46. | \*\*Roberts, N. J., Brittain, V., † Adise, S., Keller, K. L., & **Geier, C. F**. (2017) Examining Differences in Healthy Weight vs. Overweight Adolescents in Reward Sensitivity. Poster presentation at the International Congress for Developmental Cognitive Neuroscience (Flux): Portland, Oregon. |
| 45. | \*\*Roberts, N. J. & **Geier, C. F**. (August, 2017) Biological Mechanisms Underlying Food Intake and Weight Status in Adolescents. Oral presentation at the EADP/EARA/SRA Summer School: University of Utrecht, The Netherlands. |
| 44. | † Adise, S., Caprio, A. M., \*\*Roberts, N. J., White, C. N., **Geier, C. F.,** & Keller, K. L. (2017) Differences in brain response to anticipation for food and money rewards predicts children’s intake of savory foods served at a highly palatable buffet meal. Poster presentation at the Program for Translational Research on Adversity and Neurodevelopment (P-TRAN): State College, PA. |
| 43. | **\*\***Roberts, N.J., **\*\***Lydon, D.L., **\*\***White, R., & **Geier, C.F.** (2016). Development of reward and cognitive control resting state connectivity networks using extended unified structural equation modeling. Society for Neuroscience Annual Meeting, San Diego, CA |
| 42. | † Adise, S., Caprio, A.M., **\*\***Roberts, N.J., White, C.N., **Geier, C.F**., Keller, K.L. (2016). Differences in brain response to anticipation for food and money rewards predicts children’s intake of savory foods served at a highly palatable buffet. Society for Neuroscience Annual Meeting, San Diego, CA |
| 41. | **\*\***White, R., **\*\***Lydon, D., **\*\***Lo, L.L., Luna, B., & **Geier, C.F**. (2015). Development of Reward and Cognitive Control Connectivity using Group Iterative Multiple Model Estimation (GIMME). The International Congress for Integrative Developmental Cognitive Neuroscience - ‘FLUX Congress’ (2015) – Leiden, Netherlands. |
| 40. | **\*\***Roberts, N., **\*\***Braymiller, J. & **Geier, C.F.** (2015). The Relationship between Inhibitory Control and Weight Status in Adolescence: A Pilot Study Incorporating fMRI, Behavioral Measures, and *ad libitum* Food Intake. The International Congress for Integrative Developmental Cognitive Neuroscience - ‘FLUX Congress’ (2015) – Leiden, Netherlands. |
| 39. | **\*\***Lydon, D., Ram, N., **Geier, C.F.**, & Gatzke-Kopp, L. (2015). Effort Discounting in Children Exposed to Prenatal Smoking. The International Congress for Integrative Developmental Cognitive Neuroscience - ‘FLUX Congress’ (2015) – Leiden, Netherlands. |
| 38. | **\*\***Roberts, N., **\*\***Lydon, D., & **Geier, C.F**. (2014). Incentive Effects on Visual Spatial Working Memory. The International Congress for Integrative Developmental Cognitive Neuroscience - ‘FLUX Congress’ (2014) – Hollywood, CA. |
| 37. | **\*\***Lydon, D. & **Geier, C.F**. (2014). Differences in the Perceived Causal Structures of Cigarette Addiction in Late Adolescent Smokers and Non-smokers. Poster presented at the 2014 American Psychological Association Convention, Washington, D.C.  |
| 36. | **Geier, C.F**., **\*\***Lydon, D., & **\*\***Roberts, N. \*\* (2014). The influence of incentives on cognitive control during adolescence. The International Congress for Integrative Developmental Cognitive Neuroscience - ‘FLUX Congress’ (2014) – Hollywood, CA. *Presenter* |
| 35. | **\*\***Lydon, D. & **Geier, C.F**. (2014). Integrating smoking beliefs into a neurobiological model of smoking-related decision-making. The International Congress for Integrative Developmental Cognitive Neuroscience - ‘FLUX Congress’ (2014) – Hollywood, CA. |
| 34. | **\*\***Lydon, D., Spory, M., Howard, M., & **Geier, C.F**. (2014). The Perceived Causal Structures of Cigarette Addiction in Late Adolescent Smokers and Non-Smokers. Graduate Poster Exhibition, Penn State |
| 33. | Sweitzer, M., **Geier, C.F.,** Joel, D., Denlinger, R., Forbes, E., & Donny, E. Neural predictors of smoking cessation outcomes using a contingency management framework. Society for Research in Nicotine and Tobacco Annual Meeting (2014).  |
| 32. | Paulson, D., **Geier, C.F.,** & Luna, B. Developmental changes in incentive processing during inhibitory control: A longitudinal fMRI study. The International Congress for Integrative Developmental Cognitive Neuroscience - ‘FLUX Congress’ (2013). |
| 31. | **Geier, C.F.** The Influence of Incentives on Inhibitory Control During Adolescence: A Developmental Cognitive Neuroscience Approach. Talk presented at The International Congress for Integrative Developmental Cognitive Neuroscience - ‘FLUX Congress’ (2013). *Presenter* |
| 30. | **\*\***Lydon, D.M., **\*\***Child, A., **\*\***Beahm, J., & **Geier, C.F**. Incentive Effects on Inhibitory Control Across Developmental and Cigarette-smoking Samples. The International Congress for Integrative Developmental Cognitive Neuroscience - ‘FLUX Congress’ (2013).  |
| 29. | **\*\***Lydon, D.M., **\*\***Child, A., Beahm, J. \*\*, & **Geier, C.F**. A Novel Mixed Anti- and Visually Guided Saccade Task to Assess Incentive Effects on Inhibitory Control. Society for Neuroscience Abstracts (2013).  |
| 28. | Wilson, S.J., Beltz, A.M., Henry, S.L., **Geier, C.F.,** Gilmore, R.O., Turrisi, R.J., & Berenbaum, S.A. Neurocognitive Processing in Relation to Changing Alcohol Use Across the Early Years of College. Research Society on Alcoholism Annual Meeting (2013).  |
| 27. | **Geier, C.F**., & Luna, B. Incentive Effects on Response Inhibition in Healthy Adolescents and Young Adults. Society for Research on Child Development (2013). Talk presented at symposium. *Presenter* |
| 26. | Sweitzer, M.M., **Geier, C.F**., Joel, D., McGurrin, P., Denlinger, R., Donny, E.C. Dissociated effects of anticipation of smoking versus monetary reward in the striatum as a function of abstinence. Society for Neuroscience Abstracts (2012). |
| 25. | Hallquist, M.N., **Geier, C.F.**, Luna, B. Functional Brain Networks Underlying Reward Processing and Inhibitory Control in Adolescence and Adulthood. Organization for Human Brain Mapping Conference (2011) |
| 24. | **Geier, C.F.**, Sweitzer, M., Denlinger, R., Sparacino, G., & Donny, E.C. Activation Differences Evoked During a Rewarded Antisaccade Task in Abstinent Adult Smokers and Non-Smokers. Society for Neuroscience Abstracts (2011). *Presenter* |
| 23. | **Geier, C.F.**, Sweitzer, M., Denlinger, R., Sparacino, G., & Donny, E.C. The Effects of Reward Contingency on Response Inhibition in Adult Abstinent Smokers and Non-smokers. The Society for Research on Nicotine and Tobacco Annual Meeting (2011). *Presenter* |
| 22. | **Geier, C.F.**, Terwilliger, R., & Luna, B. Persistent Immaturities in Different Stages of Incentive Processing after Minimizing Value Differences. Tenth Annual Western Psychiatric Institute and Clinic Research Day (2010) \*\***Best poster award – post doc.** *Presenter* |
| 21. | Long, E., Thatcher, D.L., Luna, B., **Geier, C.F.**, & Clark, D.B. Substance use disorder (SUD) Risk and Inhibitory Control on an Antisaccade Task Tenth Annual Western Psychiatric Institute and Clinic Research Day (2010) |
| 20. | Asato, M.A., Nawarawong, N., **Geier, C.F.**, Hermann, B., Terwilliger, R., & Luna, B. Neurobiologic Correlates of Cognitive and Psychiatric Comorbidity in Pediatric Epilepsy. Tenth Annual Western Psychiatric Institute and Clinic Research Day (2010) |
| 19. | Long, E. Thatcher, D. L., Luna, B., **Geier, C.F**., & Clark, D. Substance use disorder risk and inhibitory control on an anti-saccade task. CPDD (2010)  |
| 18. | **Geier, C.F**., Terwilliger, R., & Luna, B. Persistent Immaturities in Different Stages of Incentive Processing after Minimizing Value Differences in Adolescents and Adults. Society for Neuroscience Abstracts (2009). *Presenter* |
| 17. | Luna, B., **Geier, C.F**., Fox, K., Terwilliger, R. Brain System Changes Underlying the Development of Working Memory through Adolescence. Schizophrenia Congress (2009)  |
| 16. | Asato, M.A., **Geier, C.F**., Terwilliger, R., Meachim, M., Crumrine, P.K., Luna, B. The Nature of Executive Dysfunction in Children and Adolescents with Epilepsy: Neuroanatomical Correlates. 37th Child Neurology Society Annual Meeting (2008) |
| 15. | Willford, J.A., **Geier, C.F.**, Zeglen, M.J., Cyphert, N.W., Kruk, R.D., Luna, B., Day, N.L. Reward and Response Inhibition Processing Differences Associated with Prenatal Alcohol Exposure in Young Adults: A Fast, Event-related fMRI study. Research Society on Alcoholism Annual Meeting (2008) |
| 14. | Luna, B, **Geier, C.F**., Velanova, K., Terwilliger, R., Teslovich, T., Liu, R., Meachim, M., Asato., M. Immaturities of Cognitive Control and Reward Processing in Adolescence. Society of Biological Psychiatry, Symposium on Adolescence (2008) |
| 13. | Liu, R., Garver, K.E., **Geier, C.F**., Minshew, N., Sweeney, J.A., Luna, B. Developmental improvements in brain function supporting response inhibition from adolescence to adulthood in autism. Society for Neuroscience Abstracts (2007) |
| 12. | Asato, MR, Terwilliger, R, Crumrine, PK, Vaisleib, A, Meachim, M, Teslovich, T, Geier, CF, Yasui, E, Luna, B. Executive function impairment and psychiatric co-morbidity in pediatric epilepsy: neural correlates. Meeting of the American Epilepsy Society (2007). |
| 11. | **Geier, C.F.**, Teslovich, T., Thatcher, D., Clark, D., & Luna, B. The effects of reward contingency on response inhibition in adolescents and adults: A fast, event-related fMRI study. Society for Neuroscience Abstracts (2007). *Presenter* |
| 10. | Luna, B., Liu, R., Garver, K.E., **Geier, C.F.**, Minshew, N., Sweeney, J.A. Development of Brain Function Supporting Executive Function in High Functioning Autistic Individuals. Cognitive Neuroscience Society Abstracts (2007) |
| 9. | **Geier, C.F.**, Garver, K.E., Luna, B. Developmental Changes in the Circuitry Underlying Sustained Working Memory. Cognitive Neuroscience Society Abstracts (2007). *Presenter* |
| 8. | **Geier, C.F.**, McClelland, J., Luna, B. A Biologically-Inspired Neural Network Model of the Antisaccade Task. Cognitive Neuroscience Society Abstracts (2006). *Presenter* |
| 7. | **Geier, C.F.**, Costello, M., Willford, J.A., Luna, B. Inhibitory Responses In the Antisaccade Task Improve with Longer Fixation Times. Society for Neuroscience Abstracts (2005). *Presenter* |
| 6. | **Geier, C.F.**, Garver, K.E., Scherf, K.S., Costello, M.C., Asato, M.R., Luna, B. Working Memory Maintenance during Short and Long Delays: A Fast, Event-Related fMRI Study. Cognitive Neuroscience Society Annual Meeting (2005). *Presenter* |
| 5. | **Geier, C.F.**, Garver, K.E., Scherf, K.S., Costello, M.C., Asato, M.R., Luna, B. Early Versus Persistent Maintenance in Working Memory: A Fast Event-related fMRI Oculomotor Study. Society for Neuroscience Abstracts (2004). *Presenter* |
| 4. | Asato, M.R., Garver, K.E., Costello, M.C., Scherf, K.S., **Geier, C.F.**, Wilds, M.A., Willford, J.A., Luna, B. Brain Processes Supporting Oculomotor Sequence Learning: An Event-related fMRI study. Society for Neuroscience Abstracts (2004). |
| 3. | Luna, B., Garver, K.E., Geier, **C.F.**, Asato, M.R., Willford, J.A., Scherf, K.S. Event-related fMRI studies characterizing development of spatial working memory from late childhood to adulthood. Cognitive Neuroscience Abstracts (2004).  |
| 2. | **Geier, C.F.**, Hobbs, K.H., Hooper, S.L. Modeling p1 (LP neuron) muscle isometric motor activity. Society for Neuroscience Abstracts (2002). *Presenter* |
| 1. | **Geier, C.F.**, Huwe, J.A., Peterson E.H. Differences in posterior canal afferents to the descending and medial vestibular nuclei in *Pseudemys (Trachemys) scripta*. Association for Research in Otolaryngology Abstracts (2000). *Presenter* |

**INVITED TALKS**

|  |  |
| --- | --- |
|  |  |
| 15. | 2020 Flux: The Society for Developmental Cognitive Neuroscience, Diversity Symposium Panel Discussion (Panelist)  |
| 14. | Characterizing Reward and Cognitive Control Brain Systems Across Contexts. Invited talk at the University of Oregon, Department of Psychology and Neuroscience Institute, Summer 2018.  |
| 13. | Examining the Influence of Incentives on Cognitive Control, Department of Psychology Colloquium, Rutgers University, Newark, April 1, 2016.  |
| 12. | Normative Development of Motivated Cognitive Control and the Effects of Daily Smoking, Methodology Center Brown Bag, Penn State University (Spring 2016) |
| 11. | Adolescent Brain Development: Risks and Opportunities. Commonwealth Prevention Alliance, Penn State (June 2015) |
| 10. | Presenter, Healthy People Penn State (Fall, 2015)  |
| 9. | Presenter, Healthy People Penn State (Fall 2014)  |
| 8. | Presented at PROSPER group meeting, Penn State University (Fall 2013)  |
| 7. | Presenter, Healthy People Penn State (Fall 2013) |
| 6. | Examining the Influence of Incentives on Inhibitory Control in Adolescent Smokers. Presented at the Penn State Cancer Control and Population Health Retreat, Penn State University (Summer, 2013).  |
| 5. | A Discussion of “Using Neural Data to Test a Theory of Investor Behavior: An Application to Realization Utility”. Presented at the 2nd Annual Risk Management Symposium. Penn State University School of Business (Spring 2013).  |
| 4. | Imaging the Normative Development of Motivated Inhibitory Control and the Effects of Daily Smoking. Presented at the Prevention Research Center Seminar Series. Penn State University (Fall 2012) |
| 3. | Normative Development of Motivated Inhibitory Control and the Effects of Daily Smoking. Presented at The Methodology Center brown bag seminar series, Penn State University (Spring 2012)  |
| 2. | The Influence of Incentives on Inhibitory Control: A Developmental Cognitive Neuroscience Perspective. Presented at Penn State University (2010).  |
| 1. | fMRI and Oculomotor Studies Investigating the Maturation of Cognitive Control. Presented at the Behavioral Neuroscience Seminar, Department of Psychiatry, University of Illinois at Chicago (2007) |

**PROFESSIONAL MEMBERSHIPS**

2001- Society for Neuroscience

2003-2008 Cognitive Neuroscience Society

2013- Association for Psychological Science

2013- Society for Research in Child Development

2013- Society for Research in Adolescence

2013- Flux: The Society for Developmental Cognitive Neuroscience

2014- Society for Behavioral Medicine

2014 American Psychological Association: Divisions 7 (Dev.), 38 (Health), 50 (Addictions)

**PROFESSIONAL ACTIVITIES AND SERVICE**

Journal Reviewing

Ad hoc reviewer for:

*Addictive Behaviors, American Journal of Psychiatry, Archives of General Psychiatry, Brain and Cognition, Brain Imaging and Behavior, Brain Sciences, Brain Structure and Function, Child Development, Cerebral Cortex, Cognitive, Affective, and Behavioral Neuroscience, Current Biology*

*Developmental Cognitive Neuroscience, Developmental Neuroscience, Developmental Science, Drug and Alcohol Dependence, Experimental Brain Research, International Journal of Behavioral Development, Journal of Cognitive Neuroscience, Journal of Experimental Child Psychology, Journal of Experimental Psychology: General, Journal of Neurophysiology, Journal of Neuroscience, Journal of the American Academy of Child and Adolescent Psychiatry, Motivation and Emotion, Nature Communications, Neuroimage, Neuropsychologia, Neuroscience and Biobehavioral Reviews, Nicotine and Tobacco Research, PNAS, Psychological Bulletin, Psychological Science, Psychology of Addictive Behaviors, Social, Cognitive, Affective Neuroscience, Journal of Research on Adolescence, Journal of Adolescent Research*

*Editorial Boards:*

2022- Editorial Board Member, *Developmental Cognitive Neuroscience*

2021- Editorial Board Member, *Brain Sciences*

2019-2020 Invited Guest Editor, *Brain Sciences*, Special Issue on Adolescent Cognitive Development Across Contexts

2015-2022 Consulting Editor, *Journal of Research on Adolescence*

Grant Reviewing

2022 Ad hoc reviewer, NSF CAREER grant

2019 Ad hoc reviewer, NSF CAREER grant, NSF Cognitive Neuroscience Program

2017-2018 Penn State Social Science Research Institute (SSRI) Seed Grant reviewer

2017 Reviewer, Penn State CTSI TL1 Predoctoral Training Program Fellowship Applications

2016 Grant panel member, Collaborative Learning Networks, Directorate for Social, Behavioral, and Economic Sciences, National Science Foundation. June 1-3, 2016

Professional and Service-Related Activities

2023 Chair, Ad hoc Committee on the Implementation of GFNEC (Graduate Faculty) Qualifications, Penn State Graduate School

2022- Flux Diversity Working Group Board Member – Communications Liaison

2022 Invited reviewer for Penn State Schreyer Honors College undergraduate admissions

2021-2022 Flux Diversity Affinity Group Co-Leader: Allies and Advocates

2021 Invited reviewer for Fundamentals of Developmental Cognitive Neuroscience textbook (Cambridge University Press)

2020-2021 Penn State LGBTQIA+ Scholarship Selection Committee Member

2020- Flux Diversity Working Group Committee Member

2020 Chair – Faculty Search Committee, HDFS Penn State

2019-2020 Member, Faculty Search Committee, HDFS Penn State

2019- Co-Director, Center for Brain, Behavior, and Cognition, Penn State Neuroscience Institute

2019- Flux Dissertation Award Committee Member

2018- Co-Creator of Interdisciplinary Compassion Collaborative (with Jose Soto, Robert Roeser, C. Daryl Cameron)

2017-2018 Member, Promotion and Tenure (P&T) Review Committee, Department of Human Development and Family Studies, Penn State University

2014- Member, Social and Behavioral Neuroscience Dual-Degree Planning Committee, College of Health and Human Development, Penn State

2014- Penn State University, Graduate Admissions Committee

2014-2015 Director of HDFS Undergraduate Honors Program

2013-2014 SSRI Strategic Planning: Human Systems vision group member

2013-2017 Social, Life, and Engineering Sciences Imaging Center (SLEIC), Advisory Committee, Member

2013-2017 Social, Life, and Engineering Sciences Imaging Center (SLEIC), Safety Committee, Member

2013-2014; Program Planning, Development, and Evaluation (PPD&E), Penn State Department of Human

2019- Development and Family Studies, Committee Member

2013 Flux: The Society for Developmental Cognitive Neuroscience Funding Committee member

2012 Society for Research in Child Development (SRCD) Transitions Meeting abstract reviewer

2011-2013 Penn State University, Graduate Admissions Committee

2011 Penn State University, Child Care Centers Research Coordinator

2011 Society for Research in Adolescence (SRA) abstract reviewer

2003 Ohio Northern University, Department of Biology, Program Development and Initiatives, Committee member

Graduate Service

2003-2007 University of Pittsburgh, Department of Psychology, New student recruitment weekend planning/volunteer

2005-2006 University of Pittsburgh, Department of Psychology, Cognitive Program, Elected as Graduate Student Representative (liaison between faculty and graduate students)

2005 University of Pittsburgh, Department of Psychology, Student representative on faculty curriculum committee

2005 University of Pittsburgh, Department of Psychology, Weekly Brown Bag Seminar Series

Coordinator (Cognitive Program)

2004 University of Pittsburgh, Department of Psychology, New graduate student mentor

**TEACHING**

*Undergraduate Courses*

 Adolescent Development (HDFS 239)

 Concepts and Issues in Human Development – Honors Seminar (HDFS 300H)

*Graduate Courses*

Human Development Across the Lifespan (HDFS 501)

 Developmental Cognitive Neuroscience of Adolescence (HDFS 512)

 Analysis of Functional Magnetic Resonance Imaging (HDFS 597)

 Graduate Student Orientation and Professional Development (HDFS 590)

 Professional and Ethical Issues in HDFS (HDFS 515)

**MENTORING**

**\*\***Denotes HDFS graduate student working under my supervision

† Denotes graduate student from another department training under my supervision

*Mentor for Graduate Student Training Fellowships and Grants*

**PAMT**: Prevention and Methodology Training, NIDA (2014-current), Advisees who were awarded a PAMT fellowship: \*\*David Lydon-Staley, \*\*Nicole Roberts, \*\*Daniel Petrie

**COPT**: Childhood Obesity Prevention Training Program, USDA (2014-2019), Advisees who were awarded a COPT fellowship: \*\* Nicole Roberts, \*\*Jessica Braymiller, † Shana Adise (Dept. of Nutrition)

*COPT Graduate Student Led Grants*

2016-2017 Examining the Relationship between Puberty and Reward Sensitivity in Overweight and Healthy Weight Adolescents

 USDA Childhood Obesity Prevention Training Program: Seed Grant

 Role: Primary Mentor (\*\*Braymiller & \*\*Roberts, co-PIs)

2016-2017 The Role of Reward and Inhibitory Control Pathways in Overeating in Healthy and Overweight Children

 USDA Childhood Obesity Prevention Training Program: Seed Grant

 Role: Co-Mentor (†Adise, PI)

2015-2016 Neural Underpinnings of Reward Sensitivity in Overweight and Healthy Weight Adolescents

 USDA Childhood Obesity Prevention Training Program: Seed Grant

 Role: Primary Mentor (\*\*Braymiller & \*\*Roberts, co-PIs)

2014-2017 Understanding Decision Making and Reward for Food Choice in Overweight and Healthy Weight Children

 USDA Childhood Obesity Prevention Training Program: Seed Grant

 Role: Co-Mentor († Adise, PI)

2014-2017 Examining Reward Sensitivity, Impulsivity, and Habituation in Health Weight and Overweight Adolescents

 USDA Childhood Obesity Prevention Training Program: Seed Grant

 Role: Primary Mentor (\*\*Roberts, PI)

Graduate Student Advising

*Current students*

2022- Rinanda Shaleha, HDFS, Penn State University (Primary Advisor and Committee Chair)

 \**Fulbright Scholar (Indonesia)*

2021- Kathleen Meeks, Neuroscience, Penn State University (Primary Advisor and Thesis Chair)

 *\*Recipient of 2023 Distinguished Master’s Thesis Award from the Penn State Graduate School*

2017- Daniel Petrie, Human Development and Family Studies, Penn State University (Primary Advisor and Dissertation Chair)

\**Recipient of Harold Martin Graduate Assistant Teaching Award, PAMT pre-doctoral Fellowship*

*Previous students – Advisor and Dissertation Chair*

|  |  |
| --- | --- |
| 2014-2018 | Mike Strayer, Neuroscience, Penn State University (Co-Primary Advisor and Dissertation Co-Chair)*Current position*: Medical Associate, The Scienomics Group |
| 2013-2019 | Nicole Roberts, Human Development and Family Studies, Penn State University (Primary Advisor and Dissertation Chair)*Current position*: Research Scientist, Highmark Health |
| 2012-2017 | David Lydon-Staley, Human Development and Family Studies, Penn State University (Primary advisor and Dissertation chair)*Current position*: Assistant Professor, University of Pennsylvania  |

*Previous students – Advisor*

|  |  |
| --- | --- |
| 2021-2022 | Kelley Gunther, Psychology, Penn State University (Dissertation Committee Member)*Current position*: Postdoctoral scholar at Yale University (Dr. Dylan Gee) |
| 2016-2017 | Jacoba Rock, Human Development and Family Studies, Penn State University (HDFS first-year advisor)*Current position*: Assistant Professor, Juniata College |
| 2014-2016 | Roisin White, Human Development and Family Studies, Penn State University (HDFS first-year advisor)*Current position*: Research Scientist at Novartis (Ireland) |
| 2014-2016 | Jessica Braymiller, Human Development and Family Studies, Penn State University (HDFS first-year advisor)*Current position*: Assistant Professor, University of Buffalo |
| 2011-2012 | Kristi Goetz, Human Development and Family Studies, Penn State University (HDFS first-year advisor) |

*Graduate Student Committees (Dissertation, Comprehensive Exam, or Master’s)*

Kristina Rogers (Anatomy), Avery Sicher (Neuro), Daniel Petrie (HDFS), Mike Strayer (Neuro), Kelley Gunther (Psych), Lauren Vazquez (Psych), Alicia Vallorani (Psych), Shannon Zelle (Psych), Nicole Roberts (HDFS), Eran Auday (Psych), Shana Adise (Nutrition), David Lydon (HDFS), Jacoba Rock (HDFS), Aaron Miller (HDFS), Lawrence Lo (HDFS), Travis Nichols (Nutrition), Laural English (Nutrition), Nicole Fernbach (Nutrition), Indira Turney (Psych), Nhi Thai (Psych), Lauren Chaby (Biology), Cynthia Willner (HDFS), Jessica Braymiller (HDFS), Wendy Stein (Nutrition), David Dupuis (Neuro), Ross MacClean (Psych), Avery Rizio (Psych), Lauren Sippel (Psych)

*Undergraduate*

2022- Benjamin Doyle, Penn State University

2022- Claudia McCable, Penn State University

2022- Christine Hayes, Penn State University

2020-2022 Laxman Singanamala, Penn State University

2017-2018 Tevin Carrington, Penn State University

2015-2016 Fatima Pina, Penn State University

2015-2016 Victoria Brittain, Penn State University

2015-2016 Erica Maire, Penn State University

2014 Charnice Culmer, Penn State University, Ronald E. McNair Summer Scholar

2013-2014 Romina Fano-Barbieri, Penn State University

2013-2014 Purnima Malik, Penn State University

2013-2014 Rosanny Reyes, Penn State University

2013-2014 John Beahm, Penn State University

2013 Ashley Hamilton-Johnson, Spelman College, Summer Research Opportunity at Penn State (SROP) Undergraduate Student Researcher

2011 Hanna Mincemoyer, Penn State University, Honor’s Option for HDFS 239: Adolescent Development

2008 Theresa Teslovich. University of Pittsburgh, Analysis of event-related fMRI data investigating reward effects on inhibitory control.

2008 Lindsay Bannon. University of Pittsburgh, Eye-tracking data analysis investigating rewarded antisaccade task.

2008 Jordan Carr. University of Pittsburgh, Analysis of eye-tracking and fMRI data investigating the development of reward processing and cognitive control.

1. Jennifer Burns. University of Pittsburgh, Analysis of memory guided saccade task and rewarded antisaccade task eye tracking data.

2007 Anthony Esposito. University of Pittsburgh, Analysis of event-related fMRI data investigating the effect of rewards on response inhibition.

**OUTREACH**

2016 Gave videotaped overview of adolescent brain structural and functional maturation, highlighting specific ways in which adolescent decision making is subject to social and emotional factors more so than adults, and ways in which the adolescent brain is still malleable and subject to change during this age span. This videotape was viewed by a Colorado judge in a resentencing trial for an individual convicted as a juvenile offender; The Noble Law Firm, LLC, Lakewood, Colorado

2014 Judge, Penn State Graduate Student Research Exhibition

2012-2015 Board Member, The Daily Collegian Student Newspaper

2012 Invited contributor to written *Brief of Amicus Curiae* read by US Supreme Court in case that led to elimination of juvenile incarceration for life with no chance of parole – Miller vs. Alabama

<https://www.aacap.org/App_Themes/AACAP/docs/Advocacy/amicus_curiae/miller_v_alabama.pdf>

2009 The Adolescent Brain. Talk Delivered to Parents and School Board of Alderdice High School, Pittsburgh, PA.

2003 West Central Ohio Science Day Judge (Faculty Volunteer, Ohio Northern University)

**PROFESSIONAL DEVELOPMENT**

2021 Bias-Free Language in Academic Writing: APA Journals and Beyond

 Professional Development Seminar

 The Edna Bennett Pierce Prevention Research Center

 Penn State University

2021 Faculty Mentoring Graduate Students – Effective Communication

 Professional Development Workshop, The Graduate School

 Penn State University

2020 Understanding Implicit Bias

 Stand for State Workshop

 Penn State University

2017 AFNI Bootcamp – Intermediate to Advanced Users

 Advanced workshop offered by the AFNI working group, NIMH (Bethesda, MD)

2011- MRI Safety Training

 Social, Life, and Engineering Sciences Imaging Center (SLEIC)

 Penn State University

2006 Using AFNI to Analyze fMRI Data

 Workshop, University of Wisconsin, Milwaukee, College of Medicine

**MEDIA**

\**Non-exhaustive list of research described or cited across various media (not in chronological order)*

|  |  |
| --- | --- |
| A. | Article, "Geier Recipient of Early Career Professorship Award," Internet, PSU News, <https://www.psu.edu/news/academics/story/geier-recipient-early-career-professorship-award/> . (October 28, 2016). |
| B | Article, "Penn State Researchers to Develop Video Game to Help Autistic Teens," Newspaper, The Collegian, <http://www.collegian.psu.edu/news/campus/article_d1601080-761b-11e6-a53e-d3b82462ddb6.html> (September 9, 2016). |
| C. | Blog, <https://ifp.nyu.edu/2021/journal-article-abstracts/s12671-021-01594-9/> |
| D. | Blog,<http://www.brainblogger.com/2015/04/17/deciphering-troubled-teens-risk-taking-behavior/> |
| E. | Article, <http://www.futurity.org/sensation-seeking-teens-smoking-1582962/> |
| F. | Article, <https://medicalxpress.com/news/2017-10-teens-desire-thrills.html?src_id=alt> |
| G. | Article,<https://medicalxpress.com/news/2018-08-self-control-gradually-adolescent-brain.html?src_id=alt> |
| H. | Article,<https://www.inverse.com/article/54785-teen-behavior-risk-seekers-decision-making-reward-system-in-developing-brains> |
| I. | Policy document, <https://stacks.cdc.gov/view/cdc/44007> |
|  |  |