CURRICULUM VITAE

University of Pittsburgh

School of Medicine

# BIOGRAPHICAL

|  |  |
| --- | --- |
| **Name:** Beatriz Luna, Ph.D. | **Birth Place:** Santiago, Chile |
| **Home Address:** 5525 Hampton StreetPittsburgh, PA 15206 | **Citizenship:** Chile and United States |
| **Home Phone:** (412) 362-1558 | **E-Mail Address:** lunab@upmc.edu |
| **Business Address:**Western Psychiatric Institute & ClinicUniversity of Pittsburgh Medical CenterLoeffler Building121 Meyran AvenueSuite 100Pittsburgh, PA 15213 | **Business Fax:** (412) 383-8179 |
| **Business Phone:** (412) 383-8167 |  |

# EDUCATION and TRAINING

|  |
| --- |
| **UNDERGRADUATE:** |
| 1980-1984 | American University, Washington, DC | B.A. (1984) | Psychology |
| **GRADUATE:** |
| 1984-1985 | Duquesne UniversityPittsburgh, PA | M.A. (1985) | Clinical Psychology |
| 1988-1996 | University of PittsburghPittsburgh, PA | Ph.D. (1996) | Developmental Psychology Advisor: Velma Dobson, Ph.D. |
| **POST DOCTORAL TRAINING:** |
| 1995-1997 | Western Psychiatric Institute & ClinicPittsburgh, PA |  | Neurobehavioral Studies Mentor: John A. Sweeney, Ph.D. |

# APPOINTMENTS and POSITIONS

|  |
| --- |
| ACADEMIC: |
| 1997-2000 | University of Pittsburgh School of MedicineDepartment of PsychiatryPittsburgh, PA |  | Visiting Research Assistant Professor of Psychiatry  |
| 2000-2001 | University of Pittsburgh School of MedicineDepartment of PsychiatryPittsburgh, PA |  | Research Assistant Professor of Psychiatry |
| 2000- Present | University of Pittsburgh and Carnegie Mellon University Center for Neural Basis of CognitionPittsburgh, PA |  | Faculty |
| 2001-2002 | University of Pittsburgh School of MedicineDepartment of PsychiatryPittsburgh, PA |  | Assistant Professor of Psychiatry  |
| 2002- Present | University of Pittsburgh Medical CenterWestern Psychiatric Institute and ClinicLaboratory of Neurocognitive DevelopmentPittsburgh, PA |  | Founder and Director |
| 2002-2008 | University of Pittsburgh School of MedicineDepartment of PsychiatryPittsburgh, PA  |  | Associate Professor of Psychiatry *Primary Appointment* |
| 2003- 2011 | University of Pittsburgh Department of PsychologyPittsburgh, PA |  | Associate Professor of Psychology*Secondary Appointment* |
| 2005-Present | Center for NeuroscienceUniversity of PittsburghPittsburgh, PA |  | Training Faculty |
| 2008-2011 | University of Pittsburgh School of MedicineDepartment of PsychiatryPittsburgh, PA  |  | Associate Professor of Psychiatry with Tenure*Primary Appointment* |
| 2011-Present | University of Pittsburgh School of MedicineDepartment of PsychiatryPittsburgh, PA  |  | Professor of Psychiatry*Primary Appointment* |
| 2011-Present | University of Pittsburgh Department of PsychologyPittsburgh, PA  |  | Professor of Psychology*Secondary Appointment* |
| 2013-Present2015-Present | Children’s Hospital of Pittsburgh of UPMC Pittsburgh, PA Frontiers for Young MindsUnderstanding Neuroscience |  | Staunton Professor of PediatricsAssociate Editor |
| 2017 | Proceedings of the National Academy of Sciences of the United States of America |  | Invited Editor |
| 2017 | Judicial Education Department of the Administrative Office of Pennsylvania Courts |  | Faculty |

# MEMBERSHIPS in PROFESSIONAL and SCIENTIFIC SOCIETIES

|  |
| --- |
|  |
| Society for Neuroscience |  | 1996-Present |
| Center for Cognitive Brain Imaging |  | 1998-Present  |
| Association for Academic Minority Physicians |  | 1998  |
| Cognitive Neuroscience Society |  | 1999-Present |
| American Association for the Advancement of Science |  | 2000-Present |
| Society for Research in Child Development |  | 2001-Present |
| American Psychological Association |  | 2001-Present |
| Pittsburgh Neuroscience Society  |  | 2002-Present |
| New York Academy of Sciences |  | 2003-Present |
| American Psychological Society |  | 2004-Present |
| Society for Research on Adolescence |  | 2008-Present |
| The Society for Clinical and Translational ScienceFlux: The Society for Developmental Cognitive Neuroscience |  | 2009-Present2013-Present |

# HONORS

|  |
| --- |
|  |
| Phi Kappa Phi Honor SocietyBest Psychology Student of 1984Top Ten Women in the Arts and SciencesMagna Cum Laude |  | 1984198419841984 |
| NARSAD Young Investigator Award |  | 1997 |
| NIMH Research Career Award (K01) |  | 1999 |
| The Presidential Early Career Award for Scientists and Engineers |  | 2005 |
| Faculty Honoree at the 31st Annual Honors Convocation |  | 2007 |
| ‘Fellow’ of the World Innovation Foundation |  | 2007 |
| WPIC Department of Psychiatry Emerging Mentor Award |  | 2010 |
| Fellow of the Association for Psychological Science |  | 2011 |
| Gallagher Lecture - Society for Adolescent Health and Medicine |  | 2014 |

# PUBLICATIONS

## Refereed Articles:

1. Mastropaolo JP, Dacanay RJ, **Luna B**, Tuck DL, Riley AL. Effects of trimethyltin chloride on differential-reinforcement-of-low-rate responding. Neurobehav Toxicol Teratol. 1984 May-Jun;6(3):193-9. PMID: 6493423
2. **Luna B**, Dobson V, Carpenter NA, Biglan AW. Visual field development in infants with stage 3 retinopathy of prematurity. Invest Ophthalmol Vis Sci. 1989 Mar;30(3):580-2. PMID: 2925326
3. **Luna B**, Dobson V, Biglan AW. Development of grating acuity in infants with regressed stage 3 retinopathy of prematurity. Invest Ophthalmol Vis Sci. 1990 Oct;31(10):2082-7. PMID: 2211005
4. **Luna B**, Dobson V, Guthrie RD. Grating acuity and visual field development of infants with bronchopulmonary dysplasia. Dev Med Child Neurol. 1992 Sep;34(9):813-21. PMID: 1526351
5. Getz L, Dobson V, **Luna B**. Grating acuity development in 2-week-old to 3-year-old children born prior to term. Clin Vis Sci. 1992;7:251-6.
6. Dobson V, **Luna B**. Prototype and Teller Acuity Cards yield similar acuities in infants and young children despite stimulus differences. Clin Vis Sci. 1993;8:395-400.
7. Getz L, Dobson V, **Luna B**. Development of grating acuity, letter acuity, and visual fields in small-for-gestational-age preterm infants. Early Hum Dev. 1994 Dec;40(1):59-71. PMID: 7712962
8. **Luna B**, Dobson V, Scher MS, Guthrie RD. Grating acuity and visual field development in infants following perinatal asphyxia. Dev Med Child Neurol. 1995 Apr;37(4):330-44. PMID: 7698524
9. Getz LM, Dobson V, **Luna B**, Mash C. Interobserver reliability of the Teller Acuity Card procedure in pediatric patients. Invest Ophthalmol Vis Sci. 1996 Jan;37(1):180-7. PMID: 8550321
10. Harvey EM, Dobson V, **Luna B**. Grating acuity and visual-field development in children with intraventricular hemorrhage. Dev Med Child Neurol. 1997 Mar;39(3):167-73. PMID: 9112965
11. **Luna B**, Thulborn KR, Strojwas MH, McCurtain BJ, Berman RA, Genovese CR, Sweeney JA. Dorsal cortical regions subserving visually guided saccades in humans: an fMRI study. Cereb Cortex. 1998 Jan-Feb;8(1):40-7. PMID: 9510384
12. Sweeney JA, **Luna B**, Srinivasagam NM, Keshavan MS, Schooler NR, Haas GL, Carl JR. Eye tracking abnormalities in schizophrenia: evidence for dysfunction in the frontal eye fields. Biol Psychiatry. 1998 Oct;44(8):698-708. PMID: 9798073
13. Minshew NJ, **Luna B**, Sweeney JA. Oculomotor evidence for neocortical systems but not cerebellar dysfunction in autism. Neurology. 1999 Mar;52(5):917-22. PMID: 10102406
14. Sweeney JA, **Luna B**, Haas GL, Keshavan MS, Mann JJ, Thase ME. Pursuit tracking impairments in schizophrenia and mood disorders: step-ramp studies with unmedicated patients. Biol Psychiatry. 1999 Sep;46(5):671-80. PMID: 10472419
15. Berman RA, Colby CL, Genovese CR, Voyvodic JT, **Luna B**, Thulborn KR, Sweeney JA. Cortical networks subserving pursuit and saccadic eye movements in humans: an fMRI study. Hum Brain Mapp. 1999;8(4):209-25. PMID: 10619415
16. Sweeney JA, Rosano C, Berman RA, **Luna B**. Inhibitory control of attention declines more than working memory during normal aging. Neurobiol Aging. 2001 Jan-Feb;22(1):39-47. PMID: 11164275
17. **Luna B**, Thulborn KR, Munoz DP, Merriam EP, Garver KE, Minshew NJ, Keshavan MS, Genovese CR, Eddy WF, Sweeney JA. Maturation of widely distributed brain function subserves cognitive development. Neuroimage. 2001 May;13(5):786-93. PMID: 11304075
18. Merriam EP, Colby CL, Thulborn KR, **Luna B**, Olson CR, Sweeney JA. Stimulus-response incompatibility activates cortex proximate to three eye fields. Neuroimage. 2001 May;13(5):794-800. PMID: 11304076
19. Rosano C, Krisky CM, Welling JS, Eddy WF, **Luna B**, Thulborn KR, Sweeney JA. Pursuit and saccadic eye movement subregions in human frontal eye field: a high-resolution fMRI investigation. Cereb Cortex. 2002 Feb;12(2):107-15. PMID: 11739259
20. **Luna B**, Minshew NJ, Garver KE, Lazar NA, Thulborn KR, Eddy WF, Sweeney JA. Neocortical system abnormalities in autism: an fMRI study of spatial working memory. Neurology. 2002 Sep;59(6):834-40. PMID: 12297562
21. Keshavan MS, Diwadkar VA, Spencer SM, Harenski KA, **Luna B,** Sweeney JA. A preliminary functional magnetic resonance imaging study in offspring of schizophrenic parents. Prog Neuropsychopharmacol Biol Psychiatry. 2002 Oct;26(6):1143-9. PMID: 12452537
22. Nofzinger EA, Buysse DJ, Germain A, Carter C, **Luna B**, Price JC, Meltzer CC, Miewald JM, Reynolds CF 3rd, Kupfer DJ. Increased activation of anterior paralimbic and executive cortex from waking to rapid eye movement sleep in depression. Arch Gen Psychiatry. 2004 Jul;61(7):695-702. PMID: 15237081
23. Takarae Y, Minshew NJ, **Luna B**, Sweeney JA. Oculomotor abnormalities parallel cerebellar histopathology in autism. J Neurol Neurosurg Psychiatry. 2004 Sep;75(9):1359-61. PMID: 15314136
24. **Luna B**, Garver KE, Urban TA, Lazar NA, Sweeney JA. Maturation of cognitive processes from late childhood to adulthood. Child Dev. 2004 Sep-Oct;75(5):1357-72. PMID: 15369519
25. **Luna B**. Algebra and the adolescent brain. Trends Cogn Sci. 2004 Oct;8(10):437-9. PMID: 15450503
26. Takarae Y, Minshew NJ, **Luna B**, Krisky CM, Sweeney JA. Pursuit eye movement deficits in autism. Brain. 2004 Dec;127(Pt 12):2584-94. PMID: 15509622
27. Nowinski CV, Minshew NJ, **Luna B**, Takarae Y, Sweeney JA. Oculomotor studies of cerebellar function in autism. Psychiatry Res. 2005 Nov;137(1-2):11-9. PMID: 16214219
28. Habeych ME, Folan MM, **Luna B**, Tarter RE. Impaired oculomotor response inhibition in children of alcoholics: The role of attention deficit hyperactivity disorder. Drug Alcohol Depend. 2006 Mar;82(1):11-7. PMID: 16203110
29. Scherf KS, Sweeney JA, **Luna B**. Brain basis of developmental change in visuospatial working memory. J Cogn Neurosci. 2006 Jul;18(7):1045-58. PMID: 16839280
30. Behrmann M, Avidan G, Leonard GL, Kimchi R, **Luna B**, Humphreys K, Minshew N. Configural processing in autism and its relationship to face processing. Neuropsychologia. 2006;44(1):110-29. PMID: 15907952
31. Asato MR, Sweeney JA, **Luna B**. Cognitive processes in the development of TOL performance. Neuropsychologia. 2006;44(12):2259-69. PMID: 16797612
32. **Luna B**, Doll SK, Hegedus SJ, Minshew NJ, Sweeney JA.Maturation of executive function in autism. Biol Psychiatry. 2007 Feb;61(4):474-81. PMID: 16650833
33. Steele SD, Minshew NJ, **Luna B**, Sweeney JA. Spatial working memory deficits in autism. J Autism Dev Disord. 2007 Apr;37(4):605-12.PMID: 16909311
34. Geier CF, Garver KE, **Luna B**. Circuitry underlying temporally extended spatial working memory. Neuroimage. 2007 Apr;35(2):904-15. PMID: 17292627. *Recipient of the Tim Post Award for outstanding article by a graduate student*
35. Scherf KS, Behrmann M, Humphreys K, **Luna B**. Visual category-selectivity for faces, places, and objects emerges along different developmental trajectories. Dev Sci. 2007 Jul;10(4):F15-30. PMID: 17552930
36. Takarae Y, Minshew NJ, **Luna B**, Sweeney JA. Atypical involvement of frontostriatal systems during sensorimotor control in autism. Psychiatry Res. 2007 Nov;156(2):117-27. PMID: 17913474
37. McNamee RL, Dunfee KL, **Luna B**, Clark DB, Eddy WF, Tarter RE. Brain activation, response inhibition, and increased risk for substance use disorder. Alcohol Clin Exp Res. 2008 Mar;32(3):405-13. PMID: 18302723
38. Scherf KS, **Luna B**, Kimchi R, Minshew N, Behrmann M. Missing the big picture: impaired development of global shape processing in autism. Autism Res. 2008 Apr;1(2):114-29. PMID: 19360658
39. Scherf KS, Behrmann M, Minshew N, **Luna B**. Atypical development of face and greeble recognition in autism. J Child Psychol Psychiatry. 2008 Aug;49(8):838-47. PMID: 18422548
40. Velanova K, Wheeler ME, **Luna B**. Maturational changes in anterior cingulate and frontoparietal recruitment support the development of error processing and inhibitory control. Cereb Cortex. 2008 Nov;18(11):2505-22. PMID: 18281300
41. Takarae Y, **Luna B**, Minshew NJ, Sweeney JA. Patterns of visual sensory and sensorimotor abnormalities in autism vary in relation to history of early language delay. J Int Neuropsychol Soc. 2008 Nov;14(6):980-9. PMID: 18954478
42. Geier CF, Garver K, Terwilliger R, **Luna B**. Development of working memory maintenance. J Neurophysiol. 2009 Jan;101(1):84-99. PMID: 18971297
43. Scherf KS, Behrmann M, Kimchi R, **Luna B**. Emergence of global shape processing continues through adolescence. Child Dev. 2009 Jan-Feb;80(1):162-77. PMID: 19236399
44. Loe IM, Feldman HM, Yasui E, **Luna B**. Oculomotor performance identifies underlying cognitive deficits in attention-deficit/hyperactivity disorder. J Am Acad Child Adolesc Psychiatry. 2009 Apr;48(4):431-40. PMID: 19238098
45. D'Cruz AM, Mosconi MW, Steele S, Rubin LH, **Luna B**, Minshew N, Sweeney JA. Lateralized response timing deficits in autism. Biol Psychiatry. 2009 Aug;66(4):393-7. PMID: 19232577
46. Velanova K, Wheeler ME, **Luna B**. The maturation of task set-related activation supports late developmental improvements in inhibitory control. J Neurosci. 2009 Oct;29(40):12558-67. PMID: 19812330
47. Geier CF, Terwilliger R, Teslovich T, Velanova K, **Luna B**. Immaturities in reward processing and its influence on inhibitory control in adolescence. Cereb Cortex. 2010 Jul;20(7):1613-29. PMID: 19875675
48. Andrews JS, Ben-Shachar M, Yeatman JD, [Flom LL](http://www.ncbi.nlm.nih.gov/pubmed?term=%22Flom%20LL%22%5BAuthor%5D), **Luna B**, Feldman HM. Reading performance correlates with white-matter properties in preterm and term children. Dev Med Child Neurol. 2010;52(6):e94-100. PMID: 19747208
49. Asato MR, Terwilliger R, Woo J, **Luna B**. White matter development in adolescence: a DTI study. Cereb Cortex. 2010 Sep;20(9):2122-31. PMID: 20051363
50. Ordaz S, Davis S, **Luna B**. Effects of response preparation on developmental improvements in inhibitory control. Acta Psychol (Amst). 2010 Jul;134(3):253-63. PMID: 20347061
51. Scherf KS, **Luna B**, Minshew N, Behrmann M. Location, location, location: alterations in the functional topography of face- but not object- or place-related cortex in adolescents with autism. Front Hum Neurosci. 2010 Mar;4:26. PMID: 20631857
52. O'Hearn K, Schroer E, Minshew NJ, **Luna B.** Lack of developmental improvement on a face memory task during adolescence in autism. Neuropsychologia. 2010 Nov;48(13):3955-60. PMID: 20813119
53. Hwang K, Velanova K, **Luna B**. Strengthening of top-down frontal cognitive control networks underlying the development of inhibitory control: a functional magnetic resonance imaging effective connectivity study. J Neurosci. 2010 Nov;30(46):15535-45. PMID: 21084608. *Recipient of the Tim Post Award for outstanding article by a graduate student*
54. Asato M, Nawarawong N, Hermann B, Crumrine P, **Luna B**. Deficits in oculomotor performance in pediatric epilepsy. Epilepsia. 2011 Feb;52(2):377-85. PMID: 21087246
55. Chung T, Geier C, **Luna B**, Pajtek S, Terwilliger R, Thatcher D, Clark DB. Enhancing response inhibition by incentive: comparison of adolescents with and without substance use disorder. Drug Alcohol Depend. 2011 May;115(1-2):43.50. PMID: 21115229
56. Lee ES, Yeatman JD, **Luna B**, Feldman HM. Specific language and reading skills in school-aged children and adolescents are associated with prematurity after controlling for IQ. Neuropsychologia. 2011 Apr;49(5):906-13. PMID: 21195100
57. O’Hearn K, Lakusta L., Schroer E, Minshew N, **Luna B**. Deficits in adults with autism spectrum disorders when processing multiple objects in dynamic scenes. Autism Res. 2011 Apr;4(2):132-42. PMID: 21254449
58. Scherf KS, **Luna B**, Avidan G, Behrmann M. “What” precedes “which”: developmental neural tuning in face- and place-related cortex. Cereb Cortex. 2011 Sep;21(9):1963-80. PMID: 21257673
59. Loe IM, Lee ES, **Luna B**, Feldman HM. Behavior problems of 9-16 year-old preterm children: biological, sociodemographic, and intellectual contributions. Early Hum Dev.2011 Apr;87(4):247-52. PMID: 21316875
60. O’Hearn K, Roth JK, Courtney SM, **Luna B**, Street W, Terwilliger R, Landau B. Object recognition in Williams syndrome: uneven ventral stream activation. Dev Sci. 2011 May;14(3):549-65. PMID: 21477194
61. Espinoza-Varas B, Jang H, Lack C, **Luna B.** Executive abilities for spoken-word commands: Inhibiting conflicting responses in voice-tone classification by adolescents and adults. J Acoust Soc Am. 2011 Oct;130(4):2524. PMID: 21974237
62. Loe IM, Lee ES, **Luna B**, Feldman HM. Executive function skills are associated with reading and parent-rated child function in children born prematurely. Early Hum Dev. 2012 Feb;88(2):111-8. PMID: 21849240
63. Padmanabhan A, Geier CF, Ordaz SJ, Teslovich T, **Luna B**. Developmental changes in brain function underlying the influence of reward processing on inhibitory control. Dev Cogn Neurosci. 2011 Oct;1(4):517-29. PMID: 21966352
64. Geier CF, **Luna B**. Developmental effects of incentives on response inhibition. Child Dev. 2012 Jul-Aug;83(4):1262-74. PMID: 22540668
65. Ordaz S, **Luna B**. Sex differences in physiological reactivity to acute psychosocial stress in adolescence. Psychoneuroendocrinology. 2012 Aug;37(8):1135-57. PMID: 22281210
66. Loe IM, **Luna B,** Bledsoe IO, Yeom KW, Fritz BL, Feldman HM. Oculomotor assessments of executive function in preterm children. J Pediatr. 2012 Sep;161(3):427-433. PMID: 22480696
67. Feldman HM, Lee ES, Loe IM, Yeom KW, Grill-Spector K, **Luna B.** White matter microstructure on diffusion tensor imaging is associated with conventional magnetic resonance imaging findings and cognitive function in adolescents born preterm. Dev Med Child Neurol. 2012 Sep;54(9):809-14. PMID: 22803787
68. Hwang K, Hallquist MN, **Luna B.** The development of hub architecture in the human functional brain network. Cereb Cortex. 2013 Oct;23(10):2380-93. PMID: 22875861
69. O’Hearn K, Franceoneri S, Wright C, Minshew N, **Luna B.** The development of individuation in Autism. J Exp Psychol Hum Percept Perform. 2013 Apr;39(2):494-509. PMID: 22963232
70. Fair DA, Nigg JT, Iyer S, Bathula D, Mills KL, Dosenbach NUF, Schlaggar BL, Mennes M, Gutman D, Bangaru S, Buitelaar JK, Dickstein DP, DiMartino A, Kennedy DN, Kelly C, **Luna B**, Schweitzer JB, Velanova K, Wang Y-F, Mostofsky S, Castellanos FX, Milham MP. Distinct neural signatures detected for ADHD subtypes after controlling for micro-movements in resting state functional connectivity MRI data. Front Syst Neurosci. 2013 Feb 4;6:80. PMID: 23382713
71. Merz EC, McCall RB, Wright AJ, **Luna B**. Inhibitory Control and Working Memory in Post-Institutionalized Children. J Abnorm Child Psychol. 2013 Aug;41(6):879-90. PMID: 23519375
72. Perlman SB, **Luna B**, Hein TC, Huppert TJ. fNIRS Evidence of Prefrontal Regulation of Frustration in Early Childhood. Neuroimage. 2014 Jan 15;85 Pt 1:326-34. PMID: 23624495
73. Mosconi MW, **Luna B**, Kay-Stacey M, Nowinski CV, Rubin LH, Scudder C, Minshew N, Sweeney JA. Saccade adaptation abnormalities implicate dysfunction of cerebellar-dependent learning mechanisms in Autism Spectrum Disorders (ASD). PLoS One. 2013 May 21;8(5):e63709. PMID: 23704934
74. Hallquist MN, Hwang K, **Luna B**. The nuisance of nuisance regression: Spectral misspecification in a common approach to resting-state fMRI preprocessing reintroduces noise and obscures functional connectivity. Neuroimage. 2013 Nov 15;82:208-25. PMID: 23747457
75. Di Martino A, Yan CG, Li Q, Denio E, Castellanos FX, Alaerts K, Anderson JS, Assaf M, Bookheimer SY, Dapretto M, Deen B, Delmonte S, Dinstein I, Ertl-Wagner B, Fair DA, Gallagher L, Kennedy DP, Keown CL, Keysers C, Lainhart JE, Lord C, **Luna B**, Menon V, Minshew NJ, Monk CS, Mueller S, Müller RA, Nebel MB, Nigg JT, O'Hearn K, Pelphrey KA, Peltier SJ, Rudie JD, Sunaert S, Thioux M, Tyszka JM, Uddin LQ, Verhoeven JS, Wenderoth N, Wiggins JL, Mostofsky SH, Milham MP. The autism brain imaging data exchange: towards a large-scale evaluation of the intrinsic brain architecture in autism. Mol Psychiatry. 2014 Jun;19(6):659-67. PMID: 23774715
76. Ordaz SJ, Foran W, Velanova K, **Luna B**. Longitudinal growth curves of brain function underlying inhibitory control through adolescence. J Neurosci. 2013 Nov 13;33(46):18109-24. PMID: 24227721
77. Padmanabhan A, Lynn A, Foran W, **Luna B**, O'Hearn K. Age related changes in striatal resting state functional connectivity in autism. Front Hum Neurosci. 2013 Nov 28;7:814. PMID: 24348363
78. Takarae Y, **Luna B,** Minshew NJ, Sweeney JA. Visual motion processing and visual sensorimotor control in autism. J Int Neuropsychol Soc. 2014 Jan;20(1):113-22. PMID: 24365486
79. Simmonds D, Hallquist MN, Asato M, **Luna B**. Developmental stages and sex differences of white matter and behavioral development through adolescence: a longitudinal diffusion tensor imaging (DTI) study. Neuroimage. 2014 May 15;92:356-68. PMID: 24384150
80. O’Hearn K, Tanaka J, Lynn A, Fedor J, Minshew N, **Luna B.** Developmental plateau in visual object processing from adolescence to adulthood in autism. Brain Cogn. 2014 Oct;90:124-34. PMID: 25019999
81. Hwang K, Ghuman AS, Manoach DS, Jones SR, **Luna B.** Cortical neurodynamics of inhibitory control. J Neurosci. 2014 July 16;34(29):9551-61. PMID: 25031398
82. Triplett RL, Velanova K, **Luna B,** Padmanabhan A, Gaillard WD, Asato MR. Investigating inhibitory control in children with epilepsy: An fMRI study. Epilepsia. 2014 Oct;55(10):1667-76. PMID: 25223606
83. Di Martino A, Gair DA, Kelly C, Satterthwaite TD, Castellanos FX, Thomason ME, Craddock RC, **Luna B**, Leventhal BL, Zuo XN, Milham MP. Unraveling the miswired connectome: a developmental perspective. Neuron. 2014 Sep 17;83(6):1335-53. PMID: 25233316
84. Paulsen DJ, Hallquist MN, Geier CF, **Luna B.** Effects of incentives, age, and behavior on brain activation during inhibitory control: A longitudinal fMRI study. Dev Cogn Neurosci. 2015 Feb 11. PMID: 25284272
85. Larsen B, **Luna B.** In vivo evidence of neurophysiological maturation of the human adolescent striatum. Dev Cogn Neurosci. 2015 Apr 12. 12C:74-85. PMID: 25594607
86. Padmanabhan A, Garver K, O’Hearn K, Nawarawong N, Liu R, Minshew N, Sweeney J, **Luna B.** Developmental changes in brain function underlying inhibitory control in autism spectrum disorders. 2015 Apr 8(2):123-35. PMID: 25382787
87. Schlaggar BL, **Luna B.**: International Congress for Integrative Developmental Cognitive Neuroscience, Pittsburgh, Pennsylvania, September 19-21, 2013: Introduction. Dev Cogn Neurosci. 2015 Feb:11:1 PMID: 25660032
88. Reyes S, Pairano P, **Luna B,** Lozoff B, Algarin C. Potential effects of reward and loss avoidance in overweight adolescents. Pediatr Res. 2015 Aug;78(2):152-7. PMID 25928543
89. Chung T, Paulsen DJ, Geier CF, **Luna B**, Clark DB. 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. Dev Cogn Neurosci. 2015 Dec;16:93-100 PMID: 2606506.
90. O’Hearn K, Velanova K, Lynn A, Wright C, Hallquist M, Minshew N, **Luna, B.** Abnormalities in brain systems supporting individuation and enumeration in autism. Autism Res. 2016 Jan;9(1):82-96. PMID: 26011184
91. Perlman SB, Huppert TJ, **Luna B**. Functional Near-Infrared Spectroscopy Evidence for Development of Prefrontal Engagement in Working Memory in Early Through Middle Childhood. Cereb Cortex. 2016 Jun;26(6):2790-9. PMID: 26115660
92. **Luna B,** Marek S, Larsen B, Tervo-Clemmens B, Chahal R. An integrative model of the maturation of cognitive control. Annu Rev Neurosci. 2015 Jul 8;38:151-70. PMID: 2615478
93. Long EC, Hill J, **Luna B,** Verhulst B, Clark DB. Disruptive behavior disorders and indicators of disinhibition in adolescents: The BRIEF-SR, anti-saccade task, and D-KEFS color-word interference test. J Adolesc. 2015 Oct;44:182-90. PMID: 2677405
94. Pfefferbaum, A, Rohlfing T, Pohl KM, Lane B, Chu W, Kwon D, Nolan Nichols B, Brown SA, Tapert SF, Cummins K, Thompson WK, Brumback T, Meloy MJ, Jernigan TL, Dale A, Colrain IM, Baker FC, Prouty D, De Bellis MD, Voyvodic JT, Clark DB, **Luna B,** Chung T, Nagel BJ, Sullivan EV. Adolescent Development of Cortical and White Matter Structure in the NCANDA Sample: Role of Sex, Ethnicity, Puberty, Alcohol Drinking. Cereb Cortex. 2016 Oct;26(10):4101-21. PMID: 26408800
95. Marek S, Hwang K, Foran W, Hallquist MN, **Luna B.** The Contribution of Network Organization and Integration to the Development of Cognitive Control. PLoS Biol. 2015 Dec 29;13(12):e1002328. PMID: 26713863
96. Zhai ZW, Pajtek S, **Luna B,** Geier CF, Ridenour TA, Clark DB. Reward-modulated response inhibition, cognitive shifting, and the orbital frontal cortex in early adolescence. J Res Adolesc. 2015 Dec;25 PMID: 26755891
97. Morret LM, O’Hearn K, **Luna B,** Ghuman AS. Altered Gesture and Speech Production in ASD Detract from In-Person Communicative Quality. J Autism Dev Disord. 2016 Mar;46(3):998-1012. PMID: 26520147
98. Hwang K, Ghuman AS, Manoach DS, Jones SR, **Luna B**. Frontal Preparatory Neural Oscillations Associated with Cognitive Control: A Developmental Study Comparing Young Adults and Adolescents. Neuroimage. 2016 Aug 1;136:139-48. PMID: 27173759
99. Lynn A, Padmanabhan A, Simmonds D, Foran W, Hallquist M, **Luna B,** O’Hearn K. Functional connectivity differences in autism during face and car recognition: underconnectivity and atypical age-related changes. Dev Sci. 2016 Oct 16. PMID: 27748031
100. Hawes S, Chahal R, Hallquist M, Paulsen D, Geier C, **Luna B.** Modulation of reward-related neural activation on sensation seeking across development. Neuroimage. 2016 Dec 9 ;147:763-771. PMID: 27956207
101. Simmonds DJ, Hallquist MN, **Luna B**. Protracted development of executive and mnemonic brain systems underlying working memory in adolescence: a longitudinal fMRI study. Neuroimage. 2017 Apr 26. [Epub ahead of print] PMID: 28456583.
102. Jalbrzikowski M, Larsen B, Hallquist MN, Foran W, Calabro F, Luna B. Development of White Matter Microstructure and Intrinsic Functional Connectivity Between the Amygdala and Ventromedial Prefrontal Cortex: Associations With Anxiety and Depression. Biol Psychiatry. 2017 Jan 17. [Epub ahead of print] PMID: 28274468
103. Di Martino A, O'Connor D, Chen B, Alaerts K, Anderson JS, Assaf M, Balsters JH, Baxter L, Beggiato A, Bernaerts S, Blanken LM, Bookheimer SY, Braden BB, Byrge L, Castellanos FX, Dapretto M, Delorme R, Fair DA, Fishman I, Fitzgerald J, Gallagher L, Keehn RJ, Kennedy DP, Lainhart JE, **Luna B**, Mostofsky SH, Müller RA, Nebel MB, Nigg JT, O'Hearn K, Solomon M, Toro R, Vaidya CJ, Wenderoth N, White T, Craddock RC, Lord C, Leventhal B, Milham MP. Enhancing studies of the connectome in autism using the autism brain imaging data exchange II. Sci Data. 2017 Mar 14;4:170010. PMID: 28291247
104. Ordaz SJ, Fritz BL, Forbes EE, Luna B. The influence of pubertal maturation on antisaccade performance. Dev Sci. 2017 May 30. doi: 10.1111/desc.12568.[Epub ahead of print] PubMed PMID: 28557196.
105. Montez DF, Calabro FJ, **Luna B**. The expression of established cognitive brain states stabilizes with working memory development. Elife. 2017 Aug 19;6. pii:e25606. doi: 10.7554/eLife.25606. PMID: 28826493
106. Larsen B, Verstynen TD, Yeh FC **Luna B**. Developmental Changes in the Integration of Affective and Cognitive Corticostriatal Pathways is Associated with Reward-Driven Behavior. Cereb Cortex. (*In Press*)
107. van Rooij D, Anagnostou E, Arango C, Auzias G, Behrmann M, Calderoni S, Daly E, DeRuelle C, Di Martino A, Dinstein I, Durston S, Ecker C, Fair D, Fedor J, Fitzgerald J, Freitag C, Gallagher L, Gori I, Haar S, Hoekstra L, Jahanshad N, Jalbrzkowski M, Janssen J, Lerch J, **Luna B**, McGrath J, Muratori F, Murphy C, Murphy DGM, O'Hearn K, Oranje B, Parellada M, Retico A, Rossa P, Ribia K, Shook D, Taylor M, Thompson PM, Tosetti M, Wallace GL, Zhou F, Buitelaar JK. Cortical and subcortical brain morphometry differences between patients with autism spectrum disorders (ASD) and healthy individuals across the lifespan: results from the ENIGMA-ASD working group. Am. J. Psychiatry. *(In Press)*

## Reviews, Invited Published Papers:

1. **Luna B**, Sweeney JA. Cognitive functional magnetic resonance imaging at very-high-field: eye movement control [Review]. Top Magn Reson Imaging. 1999 Feb;10(1):3-15. PubMed PMID: 10389669
2. **Luna B**, Sweeney JA. Studies of brain and cognitive maturation through childhood and adolescence: a strategy for testing neurodevelopmental hypotheses [Review]. Schizophr Bull. 2001;27(3):443-55. PubMed PMID: 11596846
3. Lazar NA, **Luna B**, Sweeney JA, Eddy WF. Combining brains: a survey of methods for statistical pooling of information [Review]. Neuroimage. 2002 Jun;16(2):538-50. PubMed PMID: 12030836
4. Minshew NJ, Sweeney J, **Luna B**. Autism as a selective disorder of complex information processing and underdevelopment of neocortical systems [Review]. Mol Psychiatry. 2002;7 Suppl 2:S14-5. PubMed PMID: 12142935
5. Sweeney JA, Takarae Y, Macmillan C, **Luna B**, Minshew NJ. Eye movements in neurodevelopmental disorders [Review]. Curr Opin Neurol. 2004 Feb;17(1):37-42. PubMed PMID: 15090875
6. **Luna B**, Sweeney JA. The emergence of collaborative brain function: FMRI studies of the development of response inhibition [Review]. Ann N Y Acad Sci. 2004 Jun;1021:296-309. PubMed PMID: 15251900
7. Sweeney JA, **Luna B**, Keedy SK, McDowell JE, Clementz BA. fMRI studies of eye movement control: investigating the interaction of cognitive and sensorimotor brain systems [Review]. Neuroimage. 2007;36 Suppl 2:T54-60. PubMed PMID: 17499170
8. O'Hearn K, Asato M, Ordaz S, **Luna B**. Neurodevelopment and executive function in autism [Review]. Dev Psychopathol. 2008 Fall;20(4):1103-32. PubMed PMID: 18838033
9. **Luna B**, Velanova K, Geier CF. Development of eye-movement control [Review]. Brain Cogn. 2008 Dec;68(3):293-308. PubMed PMID: 18938009
10. Geier C, **Luna B**. The maturation of incentive processing and cognitive control [Review]. Pharmacol Biochem Behav. 2009 Sep;93(3):212-21. PubMed PMID: 19593842
11. **Luna B**. Developmental changes in cognitive control through adolescence [Review]. Adv Child Dev Behav. 2009;37:233-78. PubMed PMID: 19673164
12. O’Hearn K, **Luna B.** Mathematical skills in Williams syndrome: insight into the importance of underlying representations [Review]. Dev Disabil Res Rev. 2009;15(1):11-20. PubMed PMID: 19213012
13. **Luna B**, Padmanabhan A, O'Hearn K. What has fMRI told us about the development of cognitive control through adolescence? [Review]. Brain Cogn. 2010 Feb;72(1):101-13. PubMed PMID: 19765880
14. **Luna B**, Velanova K, Geier CF. Methodological approaches in developmental neuroimaging studies [Review]. Hum Brain Mapp. 2010 Jun;31(6):863-71. PMID: 20496377
15. Pope K, **Luna B**, Thomas CR. Developmental neuroscience and the courts: how science is influencing the disposition of juvenile offenders. J Am Acad Child Adolesc Psychiatry. 2012 Apr;51(4):341-2. PMID: 22449636
16. **Luna B.** The Relevance of Immaturities in the Juvenile Brain to Culpability and Rehabilitation. Hastings Law Rev. 2012;63:1469-1486.
17. **Luna B**, Paulsen DJ, Padmanabhan A, Geier C. The Teenage Brain: Cognitive Control and Motivation. Curr Dir Psychol Sci. 2013 Apr;22(2):94-100. PMID: 4285389
18. Padmanabhan A, **Luna B.** Developmental imaging genetics: Linking dopamine function to adolescent behavior. [Review] Brain Cogn. 2014 Aug;89:27-38. PMID: 24139694
19. **Luna B**, Marek S., Larsen B., Tervo-Clemmens B., and Chahal R. An Integrative Model of the Maturation of Cognitive Control Annu Rev Neurosci. 2015 Jul 8;38:151-70. In press. [Review] PMID: 26154978
20. Murty V, Calabro F, **Luna B**. The role of experience in adolescent cognitive development: Integration of executive, memory, and mesolimbic systems. Neurosci Biobehav Rev. 2016 Jul 28. PMID: 27477444

## Proceedings Of Conference And Symposia:

1. Sweeney JA, Mintun M, Rosenberg DR, **Luna B**, Thulborn KR. PET and fMRI studies of spatial working memory. In: Proceedings of the 34th Annual Meeting of the American College of Neuropsychopharmacology; 1995;San Juan, Puerto Rico. 223 p.
2. Minshew NJ, Sweeney JA, **Luna B**, Furman JM. Evidence for a primary neocortical systems abnormality in autism. In: Proceedings of the 25th Annual Meeting of the Society for Neuroscience; 1995; San Diego, CA. 293 p.
3. Sweeney JA, **Luna B**, Berman RA, McCurtain BJ, Voyvodic J, Thulborn KR. Functional MRI studies of saccadic eye movement control: Assessment of widely distributed brain function. In: Proceedings of the Fourth Annual Meeting of the International Society of Magnetic Resonance in Medicine; 1996; New York, NY. 1845 p.
4. **Luna B**, Berman RA, McCurtain BJ, Strojwas MH, Voyvodic JT, Thulborn KR, Sweeney JA. fMRI studies of visual fixation in humans. In: Proceedings of the 26th Annual Meeting of the Society for Neuroscience; 1996; Washington, DC. 1687 p.
5. Sweeney JA, **Luna B**, Berman RA, McCurtain BJ, Strojwas MH, Voyvodic J, Thulborn KR. fMRI studies of spatial working memory. In: Proceedings of the 26th Annual Meeting of the Society for Neuroscience; 1996; Washington, DC. 1688 p.
6. Berman RA, **Luna B**, McCurtain BJ, Strojwas MH, Voyvodic J, Thulborn KR, Sweeney JA. fMRI studies of human frontal eye fields. In: Proceedings of the 26th Annual Meeting of the Society for Neuroscience; 1996; Washington, DC. 1687 p.
7. Sweeney JA, **Luna B**, Strojwas M, Berman RA., McCurtain BJ, Genovese CR, Thulborn KR. Functional MRI studies of eye movement control: a paradigm for clinical applications. In: Proceedings of the Fifth Scientific Meeting and Exhibition of the International Society of Magnetic Resonance in Medicine; 1997; Vancouver, BC. 451 p.
8. **Luna B**, Strojwas MH, Thulborn KR, Sweeney JA. fMRI studies of cortical regions subserving visually-guided saccades. In: Proceedings of the 27th Annual Meeting of the Society for Neuroscience; 1997; New Orleans, LA. 2223 p.
9. Sweeney JA, **Luna B**, Strojwas MH, Thulborn KR. Mapping distinct cortical eye fields for saccadic and pursuit eye movements in humans using fMRI. In: Proceedings of the 27th Annual Meeting of the Society for Neuroscience; 1997; New Orleans, LA. 2222 p.
10. Minshew NJ, Sweeney JA, **Luna B**. Shifting attention versus executive regulation of attention in autism. Paper presented at: The 26th Annual Meeting of the International Neuropsychology Society; 1997 Feb; Orlando, FL.
11. **Luna B**, Minshew NJ, Keshavan MS, Merriam EP, Boarts DA, Genovese CR, Thulborn KR, Sweeney JA. fMRI studies of antisaccades in children and adults. In: Proceedings of the 28th Annual Meeting of the Society for Neuroscience; 1998; Los Angeles, CA. 523 p.
12. Sweeney JA, **Luna B**, Krisky CM, Genovese CR, Thulborn KR. Distinct subregions of SEF involved in memory and sensory-guided saccades in humans identified by fMRI. In: Proceedings of the 28th Annual Meeting of the Society for Neuroscience; 1998; Los Angeles, CA. 209 p.
13. Merriam EP, Olson CR, **Luna B**, Thulborn KR, Eddy WF, Colby CL, Sweeney JA. Suppression of a prepotent response activates cortex anterior to the supplementary eye field. In: Proceedings of the 29th Annual Meeting of the Society for Neuroscience; 1999; Miami, FL. 1 p.
14. **Luna B**, Minshew NJ, Keshavan MS, Merriam EP, Eddy WE, Thulborn KR, Sweeney JA. Spatial working memory improves from late childhood to adulthood: eye movement & fMRI studies. In: Proceedings of the 29th Annual Meeting of the Society for Neuroscience; 1999; Miami, FL. 1142 p.
15. **Luna B**, Merriam EP, Minshew NJ, Keshavan MS, Genovese CR, Thulborn KR, Sweeney JA. Response inhibition improves from late childhood to adulthood: Eye movement & fMRI studies. In: Proceedings of the 6th Annual Meeting of the Cognitive Neuroscience Society; 1999 April; Washington DC. 57 p.
16. Merriam EP, Colby CL, Thulborn KR, **Luna B**, Olson CR, Sweeney JA. When “right” means “left”: Activation adjacent to the three cortical eye fields when responses compete. In: Proceedings of the 7th Annual Meeting of the Cognitive Neuroscience Society; 2000; San Francisco, CA.
17. **Luna B**, Garver KE, Merriam EP, Minshew NJ, Keshavan CR, Thulborn KR, Sweeney JA. Developmental fMRI studies of spatial working memory from late childhood to adulthood. In: Proceedings of the 7th Annual Meeting of the Cognitive Neuroscience Society; 2000; San Francisco, CA. 61 p.
18. Garver KE, Minshew NJ, Sweeney JA, Thulborn KR, **Luna B**. Neocortical system abnormality in autism during an oculomotor spatial working memory task: an fMRI study. Poster session presented at: The 30th Annual Meeting of the Society for Neuroscience; 2000; New Orleans, LA.
19. **Luna B**, Garver KE, Sweeney JA. Development in cognitive and sensorimotor systems from late childhood to adulthood. Paper presented at: The 30th Annual Meeting of the Society for Neuroscience; 2000; New Orleans, LA.
20. **Luna B**, Garver KE, Gibbons MG, Minshew NJ, Sweeney JA. Maturation of basic attention and sensorimotor control from late childhood to adulthood: an fMRI study. Poster session presented at: The 31st Annual Meeting of the Society for Neuroscience; 2001; San Diego, CA.
21. Garver KE, Sweeney JA, Minshew NJ, Thulborn KR, Gibbons MG, **Luna B**. High-functioning autistic subjects show abnormalities in prefrontal cortical function during a spatial working memory task. In: Proceedings of the 8th Annual Meeting of the Cognitive Neuroscience Society; 2001; New York, NY.
22. **Luna B**, Garver KE, Urban TA, Willford JA, Welling J, Asato MR. Response preparation underlies the ability to inhibit a response: eye movement and fMRI studies from late childhood to adulthood. In: Proceedings of the 9th Annual Meeting of the Cognitive Neuroscience Society; 2002; San Francisco, CA.
23. Garver KE, Urban TA, Willford JA, Asato MR, **Luna B**. Distributed circuitry supporting preparation to inhibit a response: Eye movement and fMRI studies. In: Proceedings of the 9th Annual Meeting of the Cognitive Neuroscience Society; 2002; San Francisco, CA.
24. **Luna B**, Garver KE, Urban TA, Willford JA, Asato MR. Response preparation underlies the ability to inhibit a response: Eye movement and fMRI studies from late childhood to adulthood. In: Proceedings of the 10th Annual Meeting of the Cognitive Neuroscience Society; 2003; New York, NY.
25. **Luna B**. The emergence of collaborative brain function: fMRI studies investigating the development of response suppression. Paper presented at: The 185th Annual Meeting of the New York Academy of Sciences; 2003; New York, NY.
26. **Luna B**. Neuroscience of adolescence. Paper presented at: The 21st Annual Meeting of the Society for Developmental and Behavioral Pediatrics; 2003; Pittsburgh, PA.
27. **Luna B**, Garver KE, Urban TA, Willford JA, Asato MR, Scherf S. The recruitment of brain regions underlying response preparation subserves the development of voluntary response inhibition from late childhood to adulthood. Poster session presented at: The 33rd Annual Meeting of the Society for Neuroscience; 2003; New Orleans, LA.
28. **Luna B**. Adolescence: the transition to mature brain processing and cognitive control of behavior. Paper presented at: The 10th Biennial Meeting of the Society for Research on Adolescence; 2004; Baltimore, MD.
29. Asato MR, **Luna B,** Sweeney JA. Cognitive correlates of the Tower of London Task: response inhibition and working memory. Poster session presented at: The 4th Annual Western Psychiatric Institute and Clinic Research Day; 2004; Pittsburgh, PA.
30. **Luna B,** Minshew NJ, Doll S, Wilds MA, Sweeney JA. Abnormal development of executive function in autism. Presentation at: the Annual Meeting for the Collaborative Programs of Excellence in Autism; 2004; Washington, DC.
31. **Luna B**, Garver KE, Asato MR, Scherf KS, Costello MC, Willford JA, Wilds MA, Geier CF. The role of the medial temporal lobe vs. frontoparietal regions in mature working memory. Poster session presented at: The 34th Annual Meeting of the Society for Neuroscience; 2004 Oct; San Diego, CA.
32. Asato MR, Garver KE, Costello MC, Scherf KS, Geier CF, Wilds MA, Willford JA, **Luna B**.Brain processes supporting oculomotor sequence learning: an event related fMRI study. Poster session presented at: The 34th Annual Meeting of the Society for Neuroscience; 2004 Oct; San Diego, CA.
33. Asato MR, Garver K, Costello M, Scherf KS, Willford J, **Luna B.** Changes in brain function during visuomotor sequence learning. Poster session presented at: The 34th Annual Meeting of the Society for Neuroscience; 2004 Oct; San Diego, CA.
34. Geier CF, Garver KE, Scherf KS, Costello MC, Asato MR, Willford JA, **Luna B**. Early vs. persistent maintenance in working memory: a fast event-related fMRI oculomotor study. Paper presented at: The 34th Annual Meeting of the Society for Neuroscience; 2004 Oct; San Diego, CA.
35. Scherf K, Behrmann M, Lewis JM, **Luna B**. Autism and object recognition: evaluating the nature and developmental progression of deficits in configural processing. Poster session presented at: The 34th Annual Meeting of the Society for Neuroscience; 2004 Oct; San Diego, CA.
36. Willford JA, Scherf KA, Asato M, Garver K, Sweeney JA, **Luna B**. A block design fMRI study to identify the distributed circuitry underlying antisaccade performance in adults. Poster session presented at: The 34th Annual Meeting of the Society for Neuroscience; 2004 Oct; San Diego, CA.
37. Geier CF, Garver KE, Scherf KS, Costello MC, Asato MR, Willford JA, **Luna B.** Working memory maintenance during short and long delays: A fast event-related fMRI study. Poster session presented at: The 13th Annual Meeting of Cognitive Neuroscience Society; 2005 Apr; New York, NY.
38. Scherf KS, Berhmann M, Minshew N, **Luna B**. Face recognition deficits in autism: A failure to develop second-order configural processing skills?Poster session presented at: The 13th Annual Meeting of Cognitive Neuroscience Society; 2005 Apr; New York, NY.
39. Costello MC, Sweeney JA, **Luna B.** Developmental differences in cognitive control using a gap/overlap antisaccade task. Poster session presented at: The NIDA Supported Symposium at the American Psychological Association Annual Meeting; 2005 Nov; Washington, DC.
40. Asato MR, **Luna B**, Sweeney JA. Development of response planning in adolescence. Poster session presented at: The NIDA Supported Symposium at the American Psychological Association Annual Meeting; 2005 Nov; Washington, DC.
41. Geier CF, Costello M, Willford JA, **Luna B.** Inhibitory responses in the antisaccade task improve with longer fixation times. Poster session presented at: The 35th Annual Meeting of Society for Neuroscience; 2005 Nov; Washington, DC.
42. Sowell ER, Thompson PM, Kan E, Toga AW, **Luna B.** Mapping relationships between frontal cortical activation and cortical thickness in normal adolescents. Slide session presented at: The 35th Annual Meeting of Society for Neuroscience; 2005 Nov; Washington, DC.
43. Geier CF, McCelland JJ, **Luna B.** A biologically inspired neural network model of the antisaccade task. Poster session presented at: The 14th Annual Meeting of Cognitive Neuroscience Society; 2006 Apr; San Francisco, CA.
44. Scherf KS, Behrmann M, **Luna B.** Emergence of face- and object-specific activation in developing brains. Poster session presented at: The 14th Annual Meeting of Cognitive Neuroscience Society; 2006 Apr; San Francisco, CA.
45. Macmillan C, Nowinski CV, Kay M, Scudder C, **Luna B,** Minshew NJ, Sweeney JA. Impaired saccade adaptation in autism. Poster session presented at: The 35th National Meeting of the Child Neurology Society; 2006 Oct; Pittsburgh, PA.
46. **Luna B,** Velanova K, Yasui EM, Thomas MA. The development of transient and sustained neural activity during voluntary response inhibition: A mixed block/event related fMRI study. Slide session presented at: The 36th Annual Meeting of Society for Neuroscience; 2006 Oct; Atlanta, GA.
47. Velanova K, Yasui EM, Thomas MA, **Luna B.** Functional anatomic correlates of voluntary response inhibition during oculomotor task performance: A mixed block/event-related fMRI study of transient and sustained neural activity. Poster session presented at: The 36th Annual Meeting of Society for Neuroscience; 2006 Oct; Atlanta, GA.
48. Asato M, Crumrine P, Yasui E, Vaisleib A, Terwilliger R, Teslovich T, **Luna B.** Neurobiological correlates of psychiatric co morbidities in medically treated pediatric epilepsy patients. Poster session presented at: The National Institute of Neurological Disorders and Stroke Curing Epilepsy 2007: Translating Discoveries into Therapies; 2007 Mar; Bethesda, MD.
49. **Luna B**. Development of brain function supporting executive function in high-functioning autistic individuals. Slide session presented at: The Scientific Program of the 2nd International Congress of the Biological Psychiatry Congress; 2007 Apr; Santiago, Chile.
50. Velanova K, Yasui E, **Luna B.** Developmental changes in brain activity associated with the commission of response inhibition errors. Poster session presented at: The 15th Annual Meeting of Cognitive Neuroscience Society; 2007 May; New York City, NY.
51. Ordaz S, Yasui E, **Luna B.** Developmental changes in response preparation mediation of voluntary response inhibition. Poster session presented at: The 15th Annual Meeting of Cognitive Neuroscience Society; 2007 May; New York City, NY.
52. Geier C, Garver K, **Luna B.** Developmental changes in the circuitry underlying sustained working memory. Poster session presented at: The 15th Annual Meeting of Cognitive Neuroscience Society; 2007 May; New York City, NY.
53. Olagunju-Jones Y, **Luna B.** Pubertal timing and cognitive performance. Poster session presented at: The 15th Annual Meeting of Cognitive Neuroscience Society; 2007 May; New York City, NY.
54. Woo J, Terwilliger R, Asato M, Olagunju-Jones Y, **Luna B.** White matter development from childhood to young adulthood corresponding to cognitive development. Poster session presented at: The 15th Annual Meeting of Cognitive Neuroscience Society; 2007 May; New York City, NY.
55. Liu R, Garver KE, Geier C, Minshew N, Sweeney JA, **Luna B.** Developmental changes in brain function supporting voluntary response suppression in high-functioning autistic individuals. Poster session presented at: The 15th Annual Meeting of Cognitive Neuroscience Society; 2007 May; New York City, NY.
56. Geier CF, Garver KE, **Luna B.** Developmental changes in the circuitry underlying sustained working memory*.* Poster session presented at: The WPIC 7th Annual Research Day; 2007 June; Pittsburgh, PA.
57. Velanova K, Yasui EM, **Luna B.** Developmental changes in brain activity associated with the commission of response inhibition errors. Poster session presented at: The WPIC 7th Annual Research Day; 2007 June; Pittsburgh, PA.
58. Asato M, Terwilliger R, Woo J, Olagunju-Jones Y, **Luna B.** White matter development from childhood to adulthood. Poster session presented at: The WPIC 7th Annual Research Day; 2007 June; Pittsburgh, PA. *Recipient of “Outstanding Poster Presentation”.*
59. **Luna B.** From adolescent vulnerabilities to mature cognitive control: Neuroimaging studies of response inhibition and reward processes. Symposia presentation at: The International Society for Research in Child & Adolescent Psychopathology 13th Scientific Meeting “The Brain and the Developing Child”; 2007 June; London, England.
60. Takarae Y, Minshew NJ, **Luna B,** Sweeney J. Functional MRI investigation of visual motion perception in autism. Poster session presented at: The Society for Neuroscience 37th Annual Meeting; 2007 Nov; San Diego, CA.
61. Liu R, Sweeney JA, Minshew NJ, Geier CF, Garver KA, **Luna B.** Developmental improvements in brain function supporting response inhibition from adolescence to adulthood in autism.Poster session presented at: The Society for Neuroscience 37th Annual Meeting; 2007 Nov; San Diego, CA.
62. Geier CF, 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.Poster session presented at: The Society for Neuroscience 37th Annual Meeting; 2007 Nov; San Diego, CA.
63. Alahyane N, Brien D, Armstrong I, **Luna B,** Munoz DP. Cognitive and sensorimotor development from early childhood to late adulthood as measured by saccadic eye movement tasks.Slide session presented at: The Society for Neuroscience 37th Annual Meeting; 2007 Nov; San Diego, CA.
64. Velanova K, **Luna B.** Sustained and transient controlled processing components engaged during oculomotor task performance show complementary developmental trajectories. Slide session presented at: The Society for Neuroscience 37th Annual Meeting; 2007 Nov; San Diego, CA.
65. Asato MR, Terwilliger R, Woo J, Velanova K, **Luna B.** White matter development from childhood to young adulthood and its contributions to cognitive control. Slide session presented at: The Society for Neuroscience 37th Annual Meeting; 2007 Nov; San Diego, CA.
66. **Luna B,** Geier C. Brain basis of developmental changes in how reward processing influences cognitive control. Symposia presentation at: The Pharmacology, Biochemistry & Behavior Conference “Impulsivity and Frontal Lobes: Roles in Psychopathology and Addiction”; 2008 Jan; Morzine, France.
67. **Luna B,** Teslovich T, Geier C. Developmental changes in brain function underlying reward processing. Symposia presentation at: The 2008 Biennial Meeting of the Society for Research in Adolescence; 2008 Mar; Chicago, Il.
68. D’Cruz AM, Nowinski CV, Kay M, Seidenfeld A, Rubin LH, Mosconi MW, Scudder C, **Luna B,** Minshew NJ, Sweeney JA. Saccadic adaptation in autism. Poster session presented at: The International Meeting for Autism Research; 2008 May; London, UK.
69. **Luna B,** Geier C, Velanova K, Terwilliger R, Teslovich T, Liu R, Meachim M, Asato M. Immaturities of cognitive control and reward processing in adolescence. Symposia presentation at: The 63rd Annual Scientific Convention and Program of the Society of Biological Psychiatry; 2008 May; Washington, DC.
70. Feldman HM, **Luna B,** Yeratman JD. Plasticity and its limits after premature birth. Symposia presentation at: The International Congress for the Study of Child Language 2008 Conference; 2008 July; Edinburgh, Scotland UK.
71. Asato MA, Geier CF, Terwilliger R, Meachim M, Crumrine PK, **Luna B**. The nature of executive dysfunction in children and adolescents with epilepsy: Neuroanatomical correlates. Poster presentation at: The Child Neurology Society 37th Annual Meeting; 2008 Nov; Santa Clara, CA.
72. Scherf S, Behrmann M, Minshew N, **Luna B.** Objects and Faces: Human Perception and Expertise. Slide session presented at: The 38th Annual Meeting of Society for Neuroscience; 2008 Nov; Washington, D.C.
73. O’Hearn K, Franconeri S, Schroer E, **Luna B**. Autism: Risk Factors and Neural Systems. Slide session presented at: The 38th Annual Meeting of Society for Neuroscience; 2008 Nov; Washington, D.C.
74. Asato MR, Willford J, Terwilliger R, Meachim M, **Luna B.** Epilepsy: in vivo and Behavior. Poster session presented at: The 38th Annual Meeting of Society for Neuroscience; 2008 Nov; Washington, D.C.
75. Andrews JS, Ben-Shachar M, Yeatman D, **Luna B,** Feldman HM. Language and Language Development III. Poster session presented at: The 38th Annual Meeting of Society for Neuroscience; 2008 Nov; Washington, D.C.
76. Asato MR, Terwilliger R, Meachim M, **Luna B.** White matter correlates of disrupted executive function development in pediatric epilepsy. Symposia presentation at: The 62nd Annual Meeting of the American Epilepsy Society; 2008 Dec; Seattle, WA.
77. Lee ES, Yeatman JD, **Luna B**, Feldman HM. Verbal working memory and sentence comprehension in preterm children 9-16 years old. In: Proceedings of the Society for Developmental and Behavioral Pediatrics Annual Meeting; 2009; Portland, OR.
78. **Luna B.** Immaturities of the Adolescent Reward System and its Effects on Decision Making. In Symposium:Frantz K, **Luna B**, Marinelli M, Cain M. The Fountain of Youth: Is Adolescent Plasticity Part of the Story? Panel session at the 42nd Annual Winter Conference on Brain Research; 2009 Jan; Copper Mountain, CO.
79. **Luna B**. Brain Systems Underlying Inhibitory Control that are Still Immature in Adolescence.In Symposium: Neurodevelopment of Cognitive Systems: Toward a Specification of Risk Trajectories for Child and Adolescent Mental Disorders. Panel session at: The 42nd Annual Winter Conference on Brain Research; 2009 Jan; Copper Mountain, CO.
80. **Luna B.** Hamlet’s Defense: The Reckless Adolescent Brain. Symposia presentation at: The Hamlet and the Adolescent Brain Symposium; 2009 Feb; St. Louis, MO.
81. Hwang K, Velanova K, Terwilliger R, **Luna B.** Developmental changes in causal connectivity of brain regions associated with inhibitory control. Poster presentation at: The 15th Annual Meeting of the Organization for Human Brain Mapping; 2009 Jun; San Francisco, CA.
82. Padmanabhan A, Geier CF, Terwilliger RA, **Luna B.** Developmental changes in brain function underlying incentive-based cognitive control. Poster presentation at: The 15th Annual Meeting of the Organization for Human Brain Mapping; 2009 Jun; San Francisco, CA.
83. **Luna B.** The Young and The Restless: the Neurobehavioral State Of The Adolescent Voluntary Control System. Symposia presentation at: The Conference on Neurocognitive Development; 2009 July; Berkeley, CA.
84. **Luna B**, Geier C, Padmanabhan A, Hwang K, Asato M. Immaturities in Adolescent Reward Processing. Symposia presentation at: The Multi-modal Neuroimaging Training Program: Symposium on “Decision-Making”; 2009 July; Pittsburgh, PA.
85. O’Hearn K, Wright C, Terwilliger R, Velanova K, Minshew N, **Luna B.** Atypical Parietal Lobe Activation during Visuospatial Processing in Autism. Nanosymposium presentation at: The 40th Annual Meeting of the Society for Neuroscience; 2009 Oct; Chicago, IL.
86. Hwang K, Velanova K, Terwilliger R, **Luna B.** Developmental Changes in Effective Connectivity Networks Associated with Inhibitory Control. Poster session presented at: The 40th Annual Meeting of the Society for Neuroscience; 2009 Oct; Chicago, IL.
87. Velanova K, **Luna B**, Wilson T, Kingsley K, Gnagy E, Nawarawong N, Pelham W, Molina B. Immature Error-Regulatory Function in Young Men with Childhood Histories of ADHD. Poster session presented at: The 40th Annual Meeting of the Society for Neuroscience; 2009 Oct; Chicago, IL.
88. **Luna B.** Immaturities in the Adolescent Brain Underlying Voluntary Control. Symposium presented at: The 40th Annual Meeting of the Society for Neuroscience; 2009 Oct; Chicago, IL.
89. Ordaz SJ, Hall M, Terwilliger R, **Luna B.**Developmental Differences in Arousal Reactivity to Anxiogenic Stimuli.Poster session presented at: The 40th Annual Meeting of the Society for Neuroscience; 2009 Oct; Chicago, IL.
90. Padmanabhan A, Terwilliger R, Geier C, **Luna B.** Developmental Changes in Brain Function Underlying Reward-Based Cognitive Control. Poster session presented at: The 40th Annual Meeting of the Society for Neuroscience; 2009 Oct; Chicago, IL.
91. Geier C, Terwilliger R, **Luna B.** Persistent Immaturities in Different States of Incentive Processing after Minimizing Motivation Differences in Adolescents and Adults. Poster session presented at: The 40th Annual Meeting of the Society for Neuroscience; 2009 Oct; Chicago, IL.
92. O’Hearn K, Franconeri S, **Luna B.** Object Individuation in Autism. Symposia presentation at: The International Meeting for Autism Research; 2010 May; Philadelphia, PA.
93. Hwang K, Velanova K, Terwilliger R, **Luna B.** Developmental changes in connectivity associated with inhibitory control. In: Proceedings of the 17th Annual Meeting of the Cognitive Neuroscience Society; 2010; Montreal, Canada.
94. Resutko M, Ordaz S, Wright C, Nawarawong N, Fritz B, Jack H, **Luna B.** The Effects of Cognitive Control on IQ. Poster session presented at: The University of Pittsburgh Diversity Poster Session; 2010 May; Pittsburgh, PA.
95. Elumogo C, Ordaz S, Hall M, **Luna B.** Gender Differences in Autonomic Arousal in Adolescence. Poster session presented at: The University of Pittsburgh Diversity Poster Session; 2010 Apr: Pittsburgh, PA.
96. Padmanabhan A, Liu R, Nawarawong N, Terwilliger R, Garver KE, Geier CF, Minshew N, Sweeney JA, **Luna B.** Developmental Changes in Brain Function Underlying Inhibitory Control in Autism. Poster presentation at: The 16th Annual Meeting of the Organization for Human Brain Mapping; 2010 Jun; Barcelona, Spain.
97. Geier CF, Terwilliger R, **Luna B.** Persistent Immaturities in Different Stages of Incentive Processing after Minimizing Motivation Differences. Poster session presented at: The WPIC Tenth Annual Research Day; 2010 Jun; Pittsburgh, PA. *Recipient of “Outstanding Poster Presentation”.*
98. Ordaz S, Montez D, Siegle G, **Luna B**. Developmental differences in arousal reactivity to unpredictable stimuli and effects on inhibitory control. NIMH Interdisciplinary Behavioral Science Center Conference on How do Executive Function and Emotion Interact; 2011 Jan; Boulder, CO. *Recipient of notable mention.*
99. **Luna B.** Development of Brain Systems/Neural Correlates: Past 20 years, Present and Future. Symposia presented at the NICHD Workshop on Cognition; 2011 Mar; Washington, DC.
100. **Luna B**, Velanova K, O’Hearn K, Asato M (*presented by Kirsten O’Hearn*). Neural basis of immaturities in cognitive control and reward processing in the teen brain. Symposia presented at the Society for Research in Child Development Biennial Meeting; 2011 Mar; Montreal, Canada.
101. Ordaz SJ, Fritz B, Tarr JA, Dahl RE, **Luna B.** Exploring the relationship between pubertal maturation and inhibitory control. Poster Session Presented at the Society for Research in Child Development Biennial Meeting; 2011 Mar; Montreal, Canada.
102. **Luna B.** Tecnicas de neuroimagenes en desarrollo y maduracion SNC. Symposia presented at: II Simposio Nuevas Tecnologias en Neurologia Infantil; Apr 2011; Bogota, Colombia.
103. **Luna B.** Normal and abnormal development of saccade control and its underlying neural circuitry. Symposia presented at the Neural Control of Movement Annual Meeting; Apr 2011; San Juan, Puerto Rico.
104. O’Hearn K, Simmonds D, Wright C, **Luna B.** Connectivity between frontal and temporal regions in autism. Poster Session Presented at the Society of Biological Society Annual Meeting 2011 May; San Francisco, CA.
105. Milham MP, Mennes M, Gutman D, Buitelaar J, Dickstein D, Fair D, Kennedy D, **Luna B,** Mostofsky S, Nigg J, Schweitzer J, Velanova K, Zang YF, Castellanos FX. Discovery science in ADHD – 200 sample reveals dysfunction in sensory and motor cortices. Poster Session Presented at the Society of Biological Society Annual Meeting 2011 May; San Francisco, CA.
106. **Luna B.** Neuroimaging evidence of adolescent immaturities in cognitive control and reward processing. Symposium presented at the Society of Biological Psychiatry Annual Meeting; 2011 May; San Francisco, CA.
107. Fair DA, Bathula D, Nigg JT, Mills KL, Iyer S, Dias TGC, Dosenbach NUF, Petersen SE, Schlaggar BL, Mennes M, Gutman D, Bangaru S, Kelly C, DiMartino A, Buitelaar J, Dickstein DP, Kennedy D, **Luna B**, Mostofsky S, Schweitzer JB, Velanova K, Wang Y, Castellanos FX, Milham MP. Characterizing functional maturation of individuals with ADHD using rs-fcMRI. Poster Session presented at the Organization for Human Brain Mapping meeting; 2011 Jun; Quebec City, Canada
108. Hallquist MN, Geier CF, **Luna B**. Functional brain networks underlying reward processing and inhibitory control in adolescence and adulthood. Poster Session presented at the Organization for Human Brain Mapping conference; 2011 Jun; Quebec City, Canada.
109. Simmonds D, Montez D, Hallquist M, **Luna B**. Longitudinal development of white matter and influence of puberty, sex and cognitive factors. Poster Session presented at the Organization for Human Brain Mapping conference; 2011 Jun; Quebec City, Canada.
110. Mennes M, Gutman D, Kelly C, Bangaru S, Zuo X, Zang Y, Wang Y, Velanova K, Schweitzer JB, Nigg J, Mostofsky S, **Luna B**, Kennedy D, Fair D, Dickstein D, Buitelaar JK, Castellanos FX, Milham MP. Functional Connectomics in ADHD, Insights from the ADHD-200 Sample. Poster Session presented at the Organization for Human Brain Mapping conference; 2011 Jun; Quebec City, Canada.
111. Simmonds DJ, D Montez, M Hallquist, **B Luna**. Longitudinal development of white matter and influence of puberty, sex and cognitive factors. Poster Session presented at the Organization of Human Brain Mapping conference; 2011 Jun; Quebec City, Canada.
112. Espinoza-Varas B,Jang H, Lack CW, **Luna B**. Inhibitory control for conflicting spoken-word information in adolescents and adults a low risk for alcohol use disorder (AUD). Poster Session presented at the Research Society on Alcoholism Annual Meeting; Jun 2011; Atlanta, GA.
113. Simmonds DJ, **B Luna**. Longitudinal development of white matter: Timing of maturation and effects of sex and behavior. Poster Session Presentation at the 2011 Society for Neuroscience Annual Meeting; 2011 Nov; Washington, DC.
114. Mills KL, Bathula D, Costa Dias TG, Fenesy MC, Musser ED, Stevens CA, Thurlow BL, Carpenter D, Buitelaar J, Castellanos FX, Dickstein DP, Kennedy D, **Luna B,** Milham MP, Mostofsky S, Schweitzer JB, Velanova K, Wang YF, Zang YP, Nagel BJ, Nigg JT, Fair DA. Altered cortico-striatal-thalamic connectivity in relation to spatial working memory capacity in children with ADHD. Poster Session Presented at the 2011 Society for Neuroscience Annual Meeting; 2011 Nov; Washington, DC.
115. Hallquist MN, Geier CF, **Luna B.** Development of functional brain networks supporting reward processing and inhibitory control. Poster Session Presented at the 2011 Society for Neuroscience Annual Meeting; 2011 Nov; Washington, DC.
116. Bowman EA, Abel LA, Bartholomeusz C, Terwilliger R, Nelson B, Pantelis C, **Luna B,** Velanova K, McGorry PD, Woods SJ. Longitudinal changes in antisaccade-related cortical activity in young people at Ultra-High Risk of psychotic illness. Poster Session Presented at the 2011 Society for Neuroscience Annual Meeting; 2011 Nov; Washington, DC.
117. Hwang K, Ghuman A, **Luna B.** Spatiotemporal brain dynamics of inhibitory control. Poster Session Presented at the 2011 Society for Neuroscience Annual Meeting; 2011 Nov; Washington, DC.
118. Padmanabhan A, Hwang K, Montez D, **Luna B**. Influence of COMT val158met on resting state functional connectivity over adolescence. Poster Session presented at the American College of Neuropsychopharmacology 50th Annual Meeting; 2011 Dec; Waikoloa, HI.
119. Di Martino S, Castellanos F, Anderson J, Alaerts K, Assaf M, Behrmann M, Deen B, Fair D, Gallagher L, Lainhart J, Lord C, **Luna B**, Minshew N, Monk C, Müller R-A, Nigg J, O'Hearn K, Pelphrey K, Peltier S, Sunaert S, Verhoeven J, Wenderoth N, Wiggins J, Milham M, Mostofsky S. The Autism Brain Imaging Data Exchange (ABIDE) consortium: open sharing of autism resting state fMRI. Poster Session presented at the Organization of Human Brain Mapping Annual Meeting; 2012 July; Beijing, China.
120. **Luna B.** The maturation of top-down frontal cognitive control through adolescence. Symposia presentation at: The 18th Annual Meeting of the Organization for Human Brain Mapping; “Assessing Network (dys-) Function in Development, At-Risk States and Psychiatric Disorders”; 2012 June; Beijing, China.
121. Hwang K, Ghuman A.S, **Luna B**. Neural synchronization of cortical networks associated with inhibitory control in adolescents and adults. Symposia presentation at: The 18th International Conference on Biomagnetism; Aug 2012; Paris, France.
122. Hallquist M. N, Hwang K, **Luna B**. The nuisance of nuisance regression: Spectral misspecification obscures functional connectivity estimates. Talk presented at: The 3rd biennial Conference on Resting State Brain Connectivity; Sep 2012; Magdeburg, Germany.
123. Ordaz S.J, Foran W, Velanova K, **Luna B.** Characterizing longitudinal growth curves of brain systems supporting the development of inhibitory control. Nanosymposium presented at Society for Neuroscience Annual Meeting; Nov 2012; New Orleans, LA.
124. Padmanabhan A, Hwang K, **Luna B**. Variability in dopamine genes influence striatal volume and resting state functional connectivity over development. Nanosymposium presented at Society for Neuroscience Annual Meeting; Nov 2012; New Orleans, LA.
125. Simmonds D, **Luna B**. The neural correlates of working memory performance in 12 year-old children. Poster presented at Society for Neuroscience Annual Meeting; Nov 2012; New Orleans, LA.
126. Velanova K, Molina B, **Luna B**. Activation during task initiation cue presentation in adolescents in with and without ADHD. Poster presented at Society for Neuroscience Annual Meeting; Nov 2012; New Orleans, LA.
127. Chahal R, Foran W, **Luna B**. Incentive influence on cognitive control in development. Poster presented at the WPIC 13th Annual Research Day; 2013 June; Pittsburgh, PA.
128. Fedor J, Lynn A, **Luna B**, O’Hearn K. Development of neural activation during face and car processing in ASD. Poster presented at the WPIC 13th Annual Research Day; 2013 June; Pittsburgh, PA.
129. Larsen B, **Luna B**. Predicting chronological age from patterns of time-averaged MRI activation in adolescents and young adults. Poster presented at the WPIC 13th Annual Research Day; 2013 June; Pittsburgh, PA.
130. Lynn A, **Luna B**, Foran W, Simmonds D, Padmanabhan A, Hallquist M, O’Hearn K. Atypical functional connectivity and development during face processing in autism. Poster presented at the WPIC 13th Annual Research Day; 2013 Jun; Pittsburgh, PA.
131. Paulsen D, Geier C, **Luna B**. Developmental changes in incentive processing during inhibitory control: a longitudinal fMRI study. Poster presented at the WPIC 13th Annual Research Day; 2013 June; Pittsburgh, PA.
132. Simmonds D, Polizzotto N, Cho R, **Luna B**. Association of DLPFC BOLD activity and gamma oscillations during working memory in early adolescence. Poster presented at the WPIC 13th Annual Research Day; 2013 June; Pittsburgh, PA.
133. Larsen B, & **Luna B**. Predicting chronological age from patterns of time-averaged fMRI activation in adolescents. Poster presented at Annual Meeting of the Organization for Human Brain Mapping; June 2013; Seattle, WA.
134. Hwang K, Ghuman AS, **Luna B**. Spatiotemporal brain dynamics of inhibitory control in adolescents and young adults. Poster presented at Annual Meeting of the Organization for Human Brain Mapping; June 2013; Seattle WA.
135. Paulsen DJ, Geier CF, & **Luna B**. Developmental changes in incentive processing during inhibitory control: A longitudinal fMRI study. Poster presented at Annual Meeting of the Organization for Human Brain Mapping; June 2013; Seattle, WA.
136. Hallquist M, Hwang K, **Luna B**. Effects of head motion on resting-state connectivity are exacerbated by a common preprocessing error. Poster presented at Annual Meeting of the Organization for Human Brain Mapping; June 2013; Seattle, WA.
137. Simmonds D, Polizzotto N, Cho R, **Luna B**. Association of DLPFC BOLD activity and gamma oscillations during working memory in early adolescence. Poster presented at Annual Meeting of the Organization for Human Brain Mapping; June 2013; Seattle WA.
138. **Luna B.** Maturation of Cognitive Control through Adolescence. Talk presented at the Flux Congress; 2013 September; Pittsburgh, PA.
139. Lynn A, **Luna B**, Foran W, Simmonds D, Padmanabhan A, Hallquist M, O’Hearn K. Atypical development of functional connectivity during face processing in autism. Poster presented at the Flux Congress; 2013 September; Pittsburgh, PA.
140. O’Hearn K, Lynn A, Fedor J, Foran W, Padmanabhan A, **Luna B**. Maturation of the neural substrates underlying face recognition typically and in autism. Poster presented at the Flux Congress; 2013 September; Pittsburgh, PA.
141. Hallquist M. N, Hwang K, **Luna B**. The nuisance of nuisance regression: Spectral misspecification in common approach to resting-state fMRI preprocessing reintroduces noise and obscures functional connectivity. Poster presented at the Flux Congress; 2013 September; Pittsburgh, PA.
142. Padmanabhan A, Hwang K, **Luna B**. Influence of variability in dopamine availability on resting state functional connectivity over adolescence. Poster presented at the Flux Congress; 2013 September; Pittsburgh, PA.
143. Hwang K, Ghuman A, **Luna B**. Age-related increases in preparatory frontal alpha and beta band neural oscillations support developmental improvements in inhibitory control from adolescence to adulthood. Poster presented at the Flux Congress; 2013 September; Pittsburgh, PA.
144. Simmonds D, Polizzotto N, Cho R, **Luna B**. Association of DLPFC BOLD activity and gamma oscillation during working memory in early adolescence. Poster presented at the Flux Congress; 2013 September; Pittsburgh, PA.
145. Paulsen D, **Luna B**, Geier C. Developmental changes in Incentive Processing during inhibitory control: a longitudinal fMRI study. Poster presented at the Flux Congress; 2013 September; Pittsburgh, PA.
146. Ordaz S, Foran W, Hwang K, Padmanabhan A, **Luna B**. Developmental changes in brain functional supporting emotionally modulated cognitive control. Poster presented at the Flux Congress; 2013 September; Pittsburgh, PA.
147. Larsen B, **Luna B**. Evidence for neurophysiological change in the adolescent stratum revealed using multivariate pattern analysis of time-averaged fMRI activation. Poster presented at the Flux Congress; 2013 September; Pittsburgh, PA.
148. **Luna B**. Impact of Diabetes/Obesity on Cognitive Function in the Developing Brain: Normative White Matter Development. Talk presented at American Psychosomatic Society: Diabetes, Obesity and the Brain; 2013 October; Washington DC.
149. **Luna B.** Brain Processes Underlying the Development of Cognitive Control through Adolescence. Talk presented at the Pontificia Universidad Católica de Chile; 2014 January; Santiago, Chile.
150. **Luna B.** Digging deeper into adolescent risk-taking: individual and contextual factors. Talk presented at the Society for Research on Adolescence 15th Biennial Meeting. 2014 March; Austin, TX.
151. Marek S, Foran W, Hwang K, **Luna B.** Inter-modular connectivity of functional brain networks strengthens over development. Poster presented at the Organization for Human Brain Mapping 2014 Annual Meeting. 2014 June; Hamburg, Germany.
152. Ordaz S, Hackman D, Rosenblum S, Gianaros P, **Luna B.** Sex differences in relation between socioeconomic status and longitudinal trajectories of brain function. Poster presented at the 2nd Annual Flux Congress. 2014 September; Hollywood, CA.
153. Perlman S, Jones B, **Luna B,** Huppert T. Brain development of irritability: A fNIRS study of executive function in preschool children. Poster presented at the 2nd Annual Flux Congress. 2014 September; Hollywood, CA.
154. Marek S, Hwang K, Foran W, **Luna B**. Developmental integration patterns of functional brain networks. Poster presented at the 2nd Annual Flux Congress. 2014 September; Hollywood, CA.
155. Hallquist M, Frank M, Dombrovski A, Paulsen D, Kim T, **Luna B.** The effect of emotional cues on uncertainty-driven exploration in adolescents and young adults. Poster presented at the 2nd Annual Flux Congress. 2014 September; Hollywood, CA.
156. Geier C, Lydon D, Lo L, Roberts N, **Luna B.** The influence of incentives on cognitive control during adolescence. Poster presented at the 2nd Annual Flux Congress. 2014 September; Hollywood, CA.
157. Simmonds D, **Luna B.** Protracted development of brain systems underlying working memory into early adulthood: a longitudinal fMRI study. Poster presented at the 2nd Annual Flux Congress. 2014 September; Hollywood, CA.
158. Larsen B, **Luna B.** The development of cortico-ventral striatal resting-state functional connectivity over adolescence. Poster presented at the 2nd Annual Flux Congress. 2014 September; Hollywood, CA.
159. Marek S, Hwang K, Foran W, **Luna B.**  Dynamic developmental patterns of integration in human functional brain networks. Poster presented at Society for Neuroscience Annual Meeting; 2014 November; Washington DC.
160. Larsen B, **Luna B.** The development of ventral striatal resting-state functional connectivity over adolescence. Poster presented at Society for Neuroscience Annual Meeting; 2014 November; Washington DC.
161. Simmonds D, **Luna B.** Protracted development of brain systems underlying working memory into early adulthood: A longitudinal fMRI study. Nanosymposium presented at Society for Neuroscience Annual Meeting; 2014 November; Washington DC.
162. Larsen B, Verstynen T, Yeh F-C, Jarbo K, **Luna B,** (June 2015). The development of corticostriatal structural connectivity patterns during adolescence. Annual Meeting of the Organization for Human Brain Mapping, Honolulu, HI.
163. Marek SA, Hwang K, Ghuman A, **Luna B**. (June 2015). Developmental Increases in Phase Synchrony Between Human Functional Brain Networks. Organization of Human Brain Mapping, Honolulu, HI.
164. Montez D, Simmonds D, **Luna B.** (June 2015) Developmental reduction in maintenance-related variability supports improvements in working memory. Organization for Human Brain Mapping, Honolulu, HI.
165. Kohli D, O’Hearn K, Lynn A, **Luna B**. (June 2015) Neural Substrates Underlying Face Processing in Autism Spectrum Disorders. Poster presented at: Fifteenth Annual Department of Psychiatry Research Day; Pittsburgh, PA.
166. Fedor J, Lynn A, Foran W, DiCicco-Bloom J**, Luna B**, O’Hearn K. Patterns of fixation during face recognition: Differences in autism across age. Poster presented at: Fifteenth Annual Department of Psychiatry Research Day; 2015 Jun 18; Pittsburgh, PA.
167. Larsen B, Verstynen T, Yeh F-C, **Luna, B.** (September 2015). The development of convergent corticostriatal structural connectivity during adolescence. Annual Meeting of the Flux Congress, Leiden, Netherlands.
168. Marek SA, Hwang K, Ghuman A, **Luna B**. (September 2015). Developmental Changes in Phase Synchrony Between Human Functional Brain Networks. Flux Congress, Leiden, NL.
169. Montez D, Simmonds D, **Luna B.** (September 2015) Reduction of neural variability within cognitive and action systems supports developmental improvements in working memory performance Flux: The International Society for Integrative Developmental Cognitive Neuroscience, Leiden, NL.
170. Tervo-Clemmens B, Simmonds D, **Luna B.** (September 2015) The Effects of Adolescent Cannabis Use on Adult Working Memory. Flux: The International Society for Integrative Developmental Cognitive Neuroscience, Leiden, NL.
171. O’Hearn K, Fedor J, Kohli D, Larsen B, Lynn A, **Luna B.** (October 2015) The neural underpinnings of social information processing during adolescence. Ohio Valley Regional Chapter of the Society for Adolescent Health and Medicine (OVSAHM) Pittsburgh, PA.
172. Tervo-Clemmens B, Simmonds D, **Luna B**. (October 2015) Cannabis Use and Adolescent Neurocognitive Development: A Prospective fMRI Study. Society for Neuroscience, Chicago, IL.
173. Montez D, Simmonds D, **Luna B**. (October 2015) Reliability in engagement of maintenance and retrieval brain activation states underlies longitudinal improvements in working memory. Society for Neuroscience, Chicago, IL.
174. Montez D, Simmonds D, **Luna B.** (November 2015) Reliability in engagement of maintenance and retrieval brain activation states underlies longitudinal improvements in working memory. Magnetic Resonance Imaging Retreat, Pittsburgh PA.
175. Fedor J, Larsen B, Lynn A, Foran W, Kohli D**, Luna B**, O’Hearn K. Age-related changes in the neural substrates underlying face processing in autism. Poster presented at: Pittsburgh Imaging Community Retreat; 2015 Nov 5; Pittsburgh, PA.
176. Larsen B, Verstynen T, Yeh, F-C, **Luna, B.** (November 2015). *Best student poster award.* The development of convergent corticostriatal structural connectivity during adolescence. Magnetic Resonance Imaging Retreat, Pittsburgh, PA.
177. Rodu J, Klein N, Simmonds D, **Luna B,** Kass R. (February 2016) Assessing dynamic connectivity from high-dimensional recordings. Poster presented at: Computational and Systems Neuroscience (Cosyne), Salt Lake City, UT.
178. Calabro FJ, Murty VP, **Luna B** (2016). Development of hippocampal-prefrontal cortex interactions through adolescence. Poster presented at: Fourth Annual Flux Conference, St Louis, MO.
179. Murty VP, Montez D, Foran W, **Luna B** (2016). Context-dependent neurodevelopment of mesolimbic network connectivity in adolescence. Poster presented at: Fourth Annual Flux Conference, St Louis, MO.
180. Marek S, Klein N, Tervo-Clemmens B, Foran W, Ghuman A, **Luna B.** (2016)Developmental Increases in Cortical resting-State Variability. Poster presented at: Fourth Annual Flux Conference, St Louis, MO.
181. Montez D, Calabro FJ, **Luna B.** (2016) Gain Stabilization of Cognitive Brain States Underlies Working Memory Development. Poster presented at: Fourth Annual Flux Conference, St Louis, MO.
182. Tervo-Clemmens B, Calabro FJ, **Luna B.** (2016) Cannabis Use and Adolescent Neurocognitive Development: A Prospective fMRI Study. Poster presented at: Fourth Annual Flux Conference, St Louis, MO.
183. Larsen B, Olafsson V, Minhas D, Calabro FJ, Price J, **Luna B.** (2016) Tissue-iron as non-invasive of striatal dopamine system neuroanatomy during adolescence. Poster presented at: Fourth Annual Flux Conference, St Louis, MO.
184. Jalbrzikowski M, Larsen B, Foran W, Calabro FJ, **Luna B.**  (2016) The development of white matter microstructure and intrinsic functional connectivity between the amygdale and ventromedial prefrontal cortex. Poster presented at: University of Pittsburgh Brain Institute, Brain Day, Pittsburgh, PA.
185. Pongibove M, Calabro F, **Luna B**. Temporal learning dynamics of age-related reward processing. Poster presented at the Dietrich School of Arts and Sciences Undergraduate Research Day; 2017 March; Pittsburgh, PA.
186. Magosin K, Montez D, **Luna B**. Effects of task complexity on the behavioral performance of oculomotor tasks during adolescence. Poster presented at the Dietrich School of Arts and Sciences Undergraduate Research Fair; 2017 March; Pittsburgh, PA.
187. Lazzaro S, Larsen B, **Luna B.** Developmental Switch Cost in Task-Switching Paradigm. Poster presented at the Dietrich School of Arts & Sciences Undergraduate Research Fair; March 2017; Pittsburgh, PA.
188. Klein N, Marek S, Simmonds D, Ventura V, Kass R, **Luna B**. Development of Oscillatory Neural Dynamics Supporting Working Memory. Poster presented at the Carnegie Mellon Statistics 50th Anniversary Student Poster Session; April 2017; Pittsburgh, PA.
189. Larsen B, Calabro FJ, Murty V, Foran W, **Luna B**. Greater learning-dependent change in hippocampal circuitry relates to reward learning in adolescence. Poster presented at: 17th Annual Department of Psychiatry Research Day; June 2017; Pittsburgh, PA.
190. Marek S, Montez D, Tervo-Clemmens B, Larsen B, Foran W, Calabro FJ, **Luna B**. Frontal Theta Band Oscillations Support the Development of Cognitive Control Maintenance and Flexibility. Poster presented at: 17th Annual Department of Psychiatry Research Day; June 2017; Pittsburgh, PA.
191. Tervo-Clemmens B, Calabro FJ, **Luna B**. Early Cannabis Use and Neurocognitive Risk: A Prospective Cohort fMRI Study. Poster presented at: 17th Annual Department of Psychiatry Research Day; June 2017; Pittsburgh, PA.
192. Montez D, **Luna B**. Developmental improvements in mean behavioral performance and behavioral variability are related to stabilizing gain signals. Poster presented at: 17th Annual Department of Psychiatry Research Day; June 2017; Pittsburgh, PA.
193. Quach A, Tervo-Clemmens B, Chung T, **Luna B**, Clark DB. Neurocognitive Development of Response Inhibition and Risk for Substance Use︎. Poster presented at: 17th Annual Department of Psychiatry Research Day; June 2017; Pittsburgh, PA.
194. McKinney R, DuBrow S, Jalbrzikowski M, Haas G, **Luna B**, Murty V. Verbal Episodic Memory Deficits in First-Episode Psychosis. Poster presented at: 17th Annual Department of Psychiatry Research Day; June 2017; Pittsburgh, PA.
195. Murty V, Shah H, Calabro FJ, Montez D, Foran W, **Luna B**. Context-dependent trajectory of mesolimbic network connectivity throughout adolescent neurodevelopment. Poster presented at: 17th Annual Department of Psychiatry Research Day; June 2017; Pittsburgh, PA.
196. Eloy L, Klein N, **Luna B**, Kass RE. Characterizing trial-to-trial variability in MEG data. Poster presented at uPNC Summer Intern Poster Session; August 2017; Pittsburgh PA.
197. Manivannan A, Jalbrzikowski M, Murty VP, Foran W, **Luna B**, Sarpal D. Linking Working Memory Activation with Duration of Untreated Psychosis in Patients with First-Episode Psychosis. Poster will be presented at: University of Pittsburgh Science 2017 conference. October 2017; Pittsburgh, PA.

## Monographs, Books, And Book Chapters:

1. Minshew NJ, **Luna B**, Johnson C. The Cognitive & Neural Basis of Autism: A Disorder of Complex Information Processing and Dysfunction of Neocortical Systems [Review]. Glidden L, editor. In: International Review of Research in Mental Retardation. San Diego, CA: Academic Press; 2000. p. 112-35.
2. **Luna B**, Sweeney JA. Cognitive Development: fMRI Studies [Review]. In: Keshavan MS, Kennedy JL, Murray RM, editors. Neurodevelopment and Schizophrenia. London/New York: Cambridge University Press; 2004. p. 45-68.
3. **Luna B.** The Maturation of Cognitive Control and the Adolescent Brain. In: Aboitiz F, Cosmelli D, editors. From Attention to Goal-Directed Behavior: Neurodynamical, Methodological and Clinical Trends. Heidelberg, Germany: Springer-Verlag; 2009. p. 249-274.
4. **Luna B**. A Maturacao do controlo cognitivo e o cérebro adolescente. In: Fonseca AC, editor. Crianças e Adolescentes. Coimbra: Nova Almedina; 2010. p. 331-370.
5. Takarae Y, **Luna B**, Sweeney JA. Development of Visual Sensorimotor Systems and Their Cognitive Mediation in Autism. In: Handbook of Growth and Growth Monitoring in Health and Disease. Springer Science+Business Media; 2011.
6. **Luna B**, Velanova. Development of Eye Movement Control. In: The editors Liversedge S, Gilchrist I, Everling S. Oxford Handbook of Eye Movements. Oxford University Press, 2011.
7. Hwang K, **Luna B**. The Development of Brain Connectivity Supporting Prefrontal Cortical Functions. In: Stuss DT, Knight RT, editors. Principles of Frontal Lobe Function, 2nd Edition. Oxford University Press 2013.
8. **Luna B**, Padmanabhan A, Geier C. The Adolescent Sensation Seeking Period: Development of Reward Processing and its Effect on Cognitive Control. In Reyna V, Zeyes V, editors. The Neuroscience of Risky Decision Making, 1st Edition. American Psychological Association 2014.
9. **Luna, B.,** Wright, C. Adolescent brain development: Implications to the juvenile criminal justice system. In Heilbrun, K (Ed); DeMatteo, D (Ed); Goldstein, NES (Ed), (2016). APA handbook of psychology and juvenile justice. APA handbooks in psychology series., (pp91-116). Washington, DC, US: American Psychological Association, xxvi, 735 pp.

## PUBLISHED ABSTRACTS:

1. **Luna B**, Dobson V, Carpenter NA, Bossler J, Bonvalot K. Development of peripheral vision in high-risk infants [Abstract]. Infant Behav Dev. 1988;11(special issue):196.
2. Getz L, Dobson V, **Luna B**. Full-term acuity card norms can be used for preterm children 0-3 years of age [Abstract]. Invest Ophthalmol Vis Sci. 1991;32(1 Suppl 1):62.
3. **Luna B**, Dobson V. Effects of perinatal asphyxia on development of grating acuity in preterm and full term infants and children [Abstract]. Invest Ophthalmol Vis Sci. 1992;33 Suppl:717.
4. **Luna B**, Dobson V, Getz, L. Infants who experience perinatal asphyxia show decreased visual field size in the first three years of life [Abstract]. Invest Ophthalmol Vis Sci. 1993;34 Suppl:1420.
5. **Luna B**, Dobson V, Scher MS, Biglan AW. Visual outcome from birth to four years of age in infants with periventricular leukomalacia [Abstract]. Invest Ophthalmol Vis Sci. 1995;36 Suppl:868.
6. Sweeney JA, **Luna B**, Berman RA, McCurtain BJ, Voyvodic J, Thulborn KR. Functional MRI studies of reflexive and voluntary saccadic eye movements [Abstract]. Neuroimage. 1996;3(1):S420.
7. Sweeney JA, Genovese C, **Luna B**, McCurtain BJ, Thulborn KR. Network function in cortical circuits: Coherence analysis of oculomotor circuitry with fMRI [Abstract]. Neuroimage. 1996;3(3):S100.
8. Spencer S, Kisler T, **Luna B**, Krisky C, Harenski K, Sweeney JA, Zeigler MR, Montrose DM, Keshavan MS. A preliminary functional magnetic resonance study of high-risk offspring and schizophrenic parents a 3.0 Tesla [Abstract]. Biol Psychiat. 2000;47(8 Suppl 1):S44.
9. Asato MR, Garver K, Geier C, Costello M, **Luna B.** fMRI techniques to assess learning and episodic memory [Abstract]. 2005;46 Suppl 8:36.
10. Macmillan C, Takarae Y, Minshew NJ, **Luna B**, Sweeney JA. Functional MRI study of oculomotor deficits in autism [Abstract]. Ann Neurol. 2005;58 Suppl 9:S86.
11. Asato M, Crumrine P, Yasui E, Wilds M, **Luna B.** Neurobiological correlates of cognitive and psychiatric comorbidity in pediatric epilepsy [Abstract]. Ann Neurol. 2006;60 Suppl 10:S182.
12. Asato MR, Crumrine PK, Yasui E, **Luna B.** Cognitive correlates of psychiatric comorbidity in pediatric epilepsy [Abstract]. Epilepsia. 2006;47 Suppl 4:284-5.
13. Asato M, Terwilliger R, Crumrine PK, Vaisleib A, Meachim M, Teslovich T, Geier C, Yasui E, **Luna B**. Executive function impairment and psychiatric comorbidity in pediatric epilepsy: Neural correlates [Abstract]. Epilepsia. 2007 Oct;48 Suppl 6:113.
14. Macmillan C, Takarae Y, **Luna B**, Minshew NJ, Sweeney JA. Behavioral and fMRI analyses of visual motor perception in autism [Abstract]. Ann Neurol. 2007;62 Suppl 11:S117.
15. Bowman E, Abel L, Barholomeusz C, Nelson B, Yung A, Yucel M, Pantelis C, **Luna B,** Velanova K, McGorry P, Wood S. Prefrontal cortical activation in people at ultra-high risk of psychosis: An fMRI study of voluntary eye movements [Abstract]. Hum Brain Mapp. 2008; 531.
16. Osorio J, Vaisleb A, **Luna B**, Asato M. Epilepsy, executive function, and sleep problems in adolescents [Abstract]. Epilepsia. 2008;49 Suppl 7:231-2.
17. Asato M, Geier C, Terwilliger R, Meachim M, Teslovich T, Crumrine P, **Luna B**. The nature of executive dysfunction in children and adolescents with epilepsy: Neuroanatomical correlates [Abstract]. Ann Neurol. 2008;64 Suppl 12:S121.
18. Willford JA, Geier CF, Zeglen MJ, Cyphert NW, Kruk RD, **Luna B**, Day NL. Reward and response inhibition processing differences associated with prenatal alcohol exposure in young adults: A fast, event-related FMRI study [Abstract]. Alcohol Clin Exp Res. 2008 Jun;32(6 Suppl 1):231A.
19. McNamee RL, Dunfee KL, **Luna B**, Clark DB, Eddy WF, Tarter RE. Functional MRI (FMRI) to assess brain activity during an inhibition task in youth at risk for substance use disorders [Abstract]. Alcohol Clin Exp Res. 2008 Jun;32(6 Suppl 1):287A.
20. Asato MR, Terwilliger R, Hermann BP, Crumrine PK, Gaillard WD, Ellsworth K, **Luna B**. The nature of executive dysfunction in children and adolescents with epilepsy: Neuroanatomical correlates [Abstract]. Ann Neurol. 2009;66 Suppl 13:S69.
21. Ordaz S, Hall M, Terwilliger R, **Luna B**. Effects of emotional arousal on inhibitory control in adolescence [Abstract]. Biol Psychiat. 2009 April;65(8 Suppl S):52S. Abstract no. 167.
22. **Luna B**, Geier CF, Fox K, Terwilliger R. Brain system changes underlying the development of working memory through adolescence: Neuroimaging studies [Abstract]. Schizophrenia Bull. 2009 Mar;35 Suppl 1:196.
23. Elumogo C, Ordaz S, Hall T, **Luna B**. Gender differences in autonomic arousal in adolescence [Abstract]. Biol Psychiat. 2010 May;67(9 Suppl S):122S. Abstract no. 434.
24. Coffman BA, Ghuman AS, Haigh SM, PS Marrell, Murphy TK, Ward KL, Jalbrzikowski M, **Luna B**, Salisbury DF. Reduced Sustained Activity during Visual Working Memory Maintenance in First-Episode Psychosis [Abstract] Biol Psychiat. 2016 April

# PROFESSIONAL ACTIVITIES

## TEACHING:

|  |  |  |
| --- | --- | --- |
| 1994 | PsychologyUniversity of Pittsburgh | *Infancy: The First Two Years of Life*: Advanced undergraduate psychology course – Full semester  |
| 1998 -  | PsychologyUniversity of Pittsburgh | *Seminar in Developmental Psychology (*Brain Maturation and Late Cognitive Development):Advanced graduate psychology course – 3 hour seminar |
| 1998 - Present | PsychologyUniversity of Pittsburgh | *Brown Bag Series (in Developmental Psychology):* Graduate students – 1 hour seminar |
| 2000 | School of MedicineUniversity of Pittsburgh | *Research Survival Skills (Preparing an R01)*: M.D. and Ph.D. Postdoctoral Fellows – 2 hour seminar |
| 2001- 2008 | School of MedicineUniversity of Pittsburgh | *Neuroimaging in Psychiatric Illness*3rd year Medical Students – 1 hour lecture |
| 2002 | School of MedicineUniversity of Pittsburgh | *Research Survival Skills (Family and Work)*: M.D. and Ph.D. Postdoctoral Fellows – 2 hour seminar |
| 2004 -Present | Biological SciencesCarnegie Mellon University | *Lecture (Magnetic Resonance Imaging in Neuroscience):* Undergraduate and Graduate Students – 1.5 hour lecture |
| 2006 | NeurobiologyUniversity of Pittsburgh | *Proseminar Lecture* (*Changes in Brain Function Supporting the Maturation of Cognitive Control: Developmental fMRI and Behavioral Studies):* Neuroscience Graduate Students – 3 hour lecture |
| 2006 | School of MedicineNeurobiologyUniversity of Pittsburgh | *Research Survival Skills* *and Ethics Workshop (Writing Research Articles)*: M.D. and Ph.D. Postdoctoral Fellows – 2 hour seminar |
| 2007 | School of MedicineUniversity of Pittsburgh, Honors College  | *Lecture (Functional MRI):* Undergraduate students – 1.5 hour lecture; Biomedicine: Past, Present & Future, MED 2101 |
| 2009 | Department of Medicine and NeurobiologyUniversity of Pittsburgh | *Research Survival Skills* *and Ethics Workshop (Grant Writing)*: M.D. and Ph.D. Postdoctoral Fellows – 2 hour seminar |
| 2010 | Department of Psychology, University of Pittsburgh | *Lecture (Immaturities in Brain Processes Underlying Adolescent Executive Function):* Undergraduate Students – 1.5 hour lecture |
| 2010 | University of Pittsburgh, School of Medicine, Honors College | *Lecture (What fMRI and DTI Have Told Us About Immaturities in Brain Processes Underlying Adolescent Executive Function):* Undergraduate students – 1.5 hour lecture; Biomedicine: Past, Present & Future, MED 2101 |
| 2011 | University of Pittsburgh, School of Medicine, Honors College | *Lecture (What fMRI and DTI Have Told Us about Immaturities in Brain Processes Underlying Adolescent Executive Function):* Undergraduate students – 1.5 hour lecture; Biomedicine History |

# MENTORING:

## Current:

|  |  |  |
| --- | --- | --- |
| 2012 - | Bart Larsen | Graduate Student, Cognitive Psychology/CNBC |
| 2014-2014-2014-2015-2015- | Brenden Tervo-ClemmensDavid MontezMaria Jalbrzikowski Finnegan Calabro, Ph.D.Vishnu Murty, Ph.D. | Graduate Student, Psychology/CNBCGraduate Student/Postdoctoral Fellow CNUPPostdoctoral Fellow, PsychologyAssistant Professor, PsychiatryAssistant Professor, Psychiatry  |
| 2017- | Orma Ravindranath | Graduate Student, Clinical Psychology |

## Past:

|  |  |  |
| --- | --- | --- |
| 2002-2005 | Miya R. Asato, M.D.  | Postdoctoral Fellow, Pediatrics/Psychiatry |
| 2003-2008 | K. Suzanne Scherf, Ph.D. | Postdoctoral Fellow, Psychiatry |
| 2003-2004 | Sara Doll, B.S | NIMH Undergraduate Fellow |
| 2003-2009 | Charles Geier, M.S. | Graduate Student, Cognitive Psychology/CNBC |
| 2005-2008 | Katerina Velanova, Ph.D.  | Postdoc/Ass Prof, Psychiatry |
| 2005 -2012 | Miya R. Asato, M.D. | Assistant Professor, Pediatrics/Psychiatry |
| 2006-2009 | Kirsten O’Hearn, Ph.D. | Postdoctoral Fellow, Psychology |
| 2006-2007 | Andrea Bostan | Graduate Student, Neuroscience/CNBC |
| 2006-2012 | Sarah Ordaz | Graduate Student, Clinical Psychology |
| 2006-2011 | Jae Woo, M.D | Senior Research Fellow, SOM, 3rd year |
| 2006-2007 | Yemisi Olagunju, M.D. | NIMH Fellow, SOM, 3rd year |
| 2008 | Krysta Fox | Graduate Student, Neuroscience/CNBC |
| 2008 | Andrea Ponting | Graduate Student, Neuroscience/CNBC |
| 2008-2012 | Kai Hwang | Graduate Student, Cognitive Psychology/CNBC |
| 2008-2012 | Aarthi Padmanabhan | Graduate Student, Cognitive Psychology/CNBC |
| 2008-2009 | Ian Bledsoe, M.D. | Research Fellow, SOM, 3rd Year |
| 2009-2011 | Charles Geier, Ph.D. | Postdoctoral Fellow, Psychology/Psychiatry |
| 2010-20112010 -20142003-20092008-20122009-20152012-20132012-20132013-20142013-20172014-20152015 | David MontezDaniel Simmonds, M.D., Ph.D.Charles Geier, Ph.D.Katerina Velanova, Ph.D. Kirsten O’Hearn, Ph.D.David Paulsen, Ph.D.Kai Hwang, Ph.D.Aarthi Padmanabhan, Ph.D.Scott MarekTyler MooreGrant Magnon | Hot Metal Bridge Program, PsychologyGraduate Student, MSTP/NeuroscienceGraduate Student/Postdoctoral AssociateAssistant Professor, PsychiatryAssistant Professor, PsychiatryPostdoctoral Associate, PsychiatryGraduate Student/Postdoc Associate (Berkeley)Graduate Student/Postdoc Associate (Stanford)Graduate Student, CNUPHot Metal Bridge Program, PsychologyGraduate Student, MSTP |
| 2016 | Patricia Stan | Graduate Student, Neuroscience/CNUP |
|  |  |  |

# CO-MENTORING:

## Current:

|  |  |  |
| --- | --- | --- |
| 2015- | Natalie Klein | Graduate Student, CMU Statistics and Machine Learning |
|  |  |  |

## Past:

|  |  |  |
| --- | --- | --- |
| 2002-2007 | Jennifer Wilford | Psychiatry - Prenatal Alcohol Exposure: Cognitive and Brain Function |
| 2002-2007 | Rebecca McNamee | Radiology - fMRI Methods Research in Children at Risk for Drug Abuse |
| 2007-2012 | Dustin Pardini | Psychiatry - Brain Function, Cognitive and Emotional Processing, and Behavioral Dysregulation |
| 2010-2015 | Michael Hallquist, Ph.D. | Assistant Professor, Psychology (Penn State) |
| 2014-2015 | Samuel Hawes, Ph.D. | Postdoc Fellow, Psychiatry/CNBC |
|  |  |  |
| 2010 - 2017 | Susan Perlman, Ph.D.  | Psychiatry - Neuroimaging of Mood Disorders in Young Children |
|  |  |  |

#  University of Pittsburgh *Graduate* Thesis Advisory Board:

|  |  |  |
| --- | --- | --- |
| 2008-2010 | Jessica Porter  | Neuroscience |
| 2008-2010 | Paul Middlebrooks  | Neuroscience |
| 2008-2010 | Andrea Ponting | Neuroscience |
| 2009-2010 | David Sturman | Neuroscience |
| 2008-2010 | Holly Gastgeb | Neuroscience |
| 2010-2011 | Emily Merz | Psychology |
| 2011-20142011-20152013-2015 | Courtney LoprestiMarvin LeathersDaniel Simmonds | Neuroscience – *reprint exam*NeuroscienceNeuroscience, MD PhD |
| 2013-2015 | Adrienne Taren | Neuroscience |
| 2013- | Kyle Dunovan | Cognitive Psychology |
| 2013-2015 | Travis Alvarez | Cognitive Psychology |
| 2015-20162015-2017 | Patrick BeukemaSarah Lichenstein | NeuroscienceClinical Psychology |
| 2015-20172015-2016 | Scott MarekDavid Montez | NeuroscienceNeuroscience |
| 2015-2016- | Brenden Tervo-ClemmensJoshua Tremel | Clinical PsychologyCognitive Psychology |

# University of Pittsburgh *Undergraduate* Honors Thesis Advisory Board:

|  |  |  |
| --- | --- | --- |
| 2006 | Alissa Ferry  | Psychology |
| 2006 | Jamie Doyle | Psychology |
| 2006 | Theresa Teslovich | Psychology |
| 2007 | Cecily Becker | Psychology |
| 2010 | Tanisha Hill-Jarrett | Psychology/Neuroscience |
| 2010 | Lauren Ropelewski | Psychology |
| 20122014  | Jared Dicicco-BloomJennifer Fedor | PsychologyPsychology/Neuroscience |

# RESEARCH:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **1.** Grant Number (Funded) | Grant Title | Role in Project  | Years Inclusive | Source  |
| ***Current Grant Support:*** |
| P50 MH103204 | Cortical Cells, Circuits, Connectivity and Cognition in Schizophrenia (Project 5: Alterations of Cortical Connectivity and Cognition in Schizophrenia) (PI – D. Lewis) | Co-Investigator | 2014-2019 | National Institute of Mental Health |
|  |  |  |  |  |
| R01 MH101096 | Neural Correlates of Adult Outcomes of Childhood ADHD: Affect, Reward, and Control (PI – B. Molina; C. Ladouceur) | Co-Investigator | 2014-2019 | National Institute of Mental Health |
|  |  |  |  |  |
| R01 MH080243  | Developmental Changes in Striatal Neurophysiology through Adolescence (PI – B. Luna) | Principal Investigator | 2015- 2020 | National Institute of Mental Health   |
|  |  |  |  |  |
| U01 DA041028 | ABCD-USA Consortium: Research Project (PI – D. Clark) | Co-Investigator | 2015-2020 | National Institute on Drug Abuse |
|  |  |  |  |  |
| R01 MH107540 | From Irritability to Impairment: How Neurodevelopment of Executive Function and Parent-Child Neural Synchrony Influence the Transition from Normal to Abnormal Functioning (PI – S. Perlman) | Co-Investigator | 2015-2020 | National Institute of Mental Health |
|  |  |  |  |  |
| U01 AA021690 | NCANDA Research Project Site: PITT (PI – D. Clark) | Co-Investigator | 2017-2022 | NIAAA |
|  |  |  |  |  |
| R03 MH113090 | Longitudinal Profiles of Neurocognitive Development through Adolescence (PI – B. Luna) | Principal Investigator | 2017-2019 | National Institute of Mental Health |
|  |  |  |  |  |
| R01 MH067924 | Brain Mechanisms Underlying Plasticity in the Specialization of Cognitive Systems through the Adolescent Period (PI – B. Luna) | Principal Investigator | 2017-2022 | National Institute of Mental Health |
|  |  |  |  |  |
| ***Prior Grant Support: (Completed in the last four years)*** |
| R01 DA018910 | Pubertal Maturation & Drug Use Vulnerability (PI – R. Dahl) | Project Co-Investigator  | 2004-2010 |  |
| R01 MH067924 | Cognitive and Brain Systems Maturation through Adolescence(PI – B. Luna) | Principal Investigator  | 2004-2011 |  |
| R21 DA021028 | Frontal White Matter, Executive Function and Treatment Outcomes in Adolescent AUDs(PI- D. Clark) | Co-Investigator  | 2005-2008 |  |
| NAAR-Autism Speaks. Research Project | Development of perceptual processing in autism (PI- B. Luna) | Principal Investigator | 2006-2008 |  |
| R21 AA017312 | Neurodevelopmental Maturation and Alcohol Use in Adolescents (PI – D. Clark) | Co-Investigator | 2007 -2009 |  |
| R01 HD053470 | Prenatal Tobacco Effects on Attention: Behavior & Brain Function (PI – J. Willford) | Co-Investigator | 2007 - 2010 |  |
| 1K01 MH082123 | The Functional Anatomy of Adolescent ADHD: Defining Markers of Recovery (PI – K. Velanova | Mentor | 2008 –2013 | National Institutes of Mental Health  |
| 3N01 DA-8-553-09S | Follow Up of the Multimodal Treatment Study of Children with Attention Deficit Hyperactivity Disorder (PI – B. Molina) | Co-Investigator | 2008-2012 |  |
|  |  |  |  |  |
| R01 MH080243  | Reward Processing in Adolescence (PI – B. Luna) | Principal Investigator | 2008 – 2020 | National Institute of Mental Health   |
|  |  |  |  |  |
| K01 MH081191 | Development of Ventral Stream Organization(PI – K. O’Hearn) | Mentor | 2009-2014 | National Institutes of Mental Health |
|  |  |  |  |  |
| R01 MH067924 | Multimodal Neurodevelopmental Studies of Cognitive Control and Arousal (PI – B. Luna) | Principal Investigator | 2011-2017 | National Institutes of Mental Health  |
|  |  |  |  |  |
|  |  |  |  |  |

# SEMINARS AND INVITED LECTURESHIPS:

1. Development of Prefrontal Function in Late Childhood and Adolescence. Invited presentation at: the Developmental Psychology Department, University of Pittsburgh; 1997; Pittsburgh, PA.
2. Development of Neocortical Function in Late Childhood and Adolescence: Preliminary Data and Designs of Behavioral and fMRI Studies using Oculomotor Tasks. Invited presentation at: the Department of Child and Adolescent Psychiatry, Western Psychiatric Institute and Clinic; 1997; Pittsburgh, PA.
3. Cognitive Maturation: fMRI Studies of Voluntary Response Suppression: Maturation and Dysmaturation of Brain Function. Invited presentation at: the Neurodevelopment Institute, University of Pittsburgh; 1998; Pittsburgh, PA.
4. Developmental fMRI Studies and Autism fMRI studies: Preliminary Data and Designs of Behavioral and fMRI Studies using Oculomotor Tasks. Department of Child and Adolescent Psychiatry, Research Colloquium Presentation, Western Psychiatric Institute and Clinic; 2000; Pittsburgh, PA.
5. How Does Our Ability to Think Mature? fMRI Studies of Cognitive Development. Invited presentation at: the Center for the Neural Basis of Cognition, University of Pittsburgh and Carnegie Mellon University; 2000; Pittsburgh, PA.
6. Maturation of Distributed Networks Subserves Development of Higher-Order Cognition Throughout Adolescence: fMRI Studies of Cognitive Development. Invited presentation at: the Cognitive Psychology Department, University of Pittsburgh; 2000; Pittsburgh, PA.
7. fMRI Studies of Cognitive Development and Autism*.* Invited presentation at: the Eunice Kennedy Shriver Center, University of Massachusetts Medical School; 2001; Waltham, MA.
8. Maturation of Brain Function: fMRI Studies of Cognitive Development. Invited presentation at: the Massachusetts General Hospital NMR Center; 2001; Boston, MA.
9. Brain Mechanisms Underlying Cognitive Maturation: fMRI Studies of Voluntary Response Suppression (8-30 years of age). Invited presentation at: the Developmental Psychology Department, University of Pittsburgh; 2001; Pittsburgh, PA.
10. What can development tell us about distributed brain function? Invited external faculty, Department of Neuroscience, annual retreat, University of Pittsburgh; 2001; Pittsburgh, PA.
11. Cognitive and brain maturation and dysmaturation in autism. Invited lecture at: the WPIC Research Day; 2001; Pittsburgh, PA.
12. Estudios de Resonancia Funcional en Desarrollo Cognitivo y Maduracion Cerebral Durante La Adolescencia [Studies of Functional Magnetic Resonance Imaging in Cognitive Development and Cerebral Maturation During Adolescence]. Invited Lecture, Morphology Department, School of Medicine, Universidad de Chile; 2002 Jan; Santiago, Chile.
13. fMRI and Developmental Studies in Psychiatry. Invited Lecture, Psychiatric Epidemiology and Alcohol Research: Research Seminars, Department of Psychiatry, University of Pittsburgh; 2002 Mar; Pittsburgh, PA.
14. Maturation of Voluntary Response Suppression throughout Adolescence. Invited Lectureship at the Culpability Meeting of the MacArthur Foundation Research Network on Adolescent Development and Juvenile Justice; 2002; St. Louis, MO.
15. Maturation and Dysmaturation of Brain Function Supporting Voluntary Control of Behavior. Invited presentation at the Department of Child and Adolescent Psychiatry, Research Colloquium, Western Psychiatric Institute and Clinic; 2002 Mar; Pittsburgh, PA.
16. The Emergence of Collaborative Brain Function: fMRI Studies Investigating the Development of Response Suppression. Invited Lecture, New York Academy of Sciences; 2003 Sep; New York City, NY.
17. Neuroscience of Adolescence. Invited Lecture, Society for Developmental and Behavioral Pediatrics; 2003 Sep; Pittsburgh, PA.
18. Adolescence: The transition to mature brain processing and cognitive control of behavior. Society for Research on Adolescence; 2004 Mar; Baltimore, MD.
19. Es el Cerebro Adolescente Igual al Adulto? Estudios de la Maduración Cognitiva usando ER-RMf [Is the Adolescent Brain Equal to the Adult? Studies of Cognitive Maturation Using Event-Related fMRI]. Universidad Catolica de Chile; 2004 Dec; Santiago, Chile.
20. Cognitive and brain mechanisms underlying adolescent behavior. Invited presentation at: the MacArthur Foundation Research Network on Adolescent Development and Juvenile Justice; 2005 Feb; Atlanta, GA.
21. Cognitive control of behavior and the immature adolescent brain. Invited speaker at the NIDA Supported Symposium, American Psychological Association Annual Meeting; 2005 Aug; Washington, DC.
22. Adolescent decision making. Invited Lecture, Forty-Third Annual Briefing: New Horizons in Science, National Meeting of Science Journalists; 2005 Oct; Pittsburgh, PA.
23. Brain and cognitive processes underlying cognitive control of behavior in adolescence.Invited speaker at: The NIDA Supported Symposium the AACAP/CACAP Joint Annual Meeting; 2005 Oct; Toronto, Ontario, Canada.
24. Adolescent drug abuse: Brain development, cognition, and vulnerability*.* Invited speaker at the NIDA Supported Symposium, American Psychological Association Annual Meeting; 2005 Nov; Washington, DC.
25. The immature adolescent brain and cognitive control. Invited Lecture, NIDA Supported Symposium Adolescent Brain Development: Implications for Psychiatric Treatment, American Psychiatric Association Annual Meeting; 2006 May; Toronto, Ontario.
26. **The development of transient and sustained neural activity during voluntary response inhibition: a mixed block/event-related fMRI study. Invited Lecture, Thirty-Sixth** Annual Meeting, Society for Neuroscience; 2006 Oct; Atlanta, GA.
27. Adolescence: A vulnerable period of brain development. Invited Speaker, University of Pittsburgh Department of Psychology: Clinical Brown Bags; 2006 Sep; Pittsburgh, PA.
28. Adolescent Brain Development and Cognitive Control of Behavior. Invited speaker. Duquesne University School Psychology Program Speaker Series. Duquesne University; 2007 Feb; Pittsburgh, PA.
29. Adolescence and the brain: Neuroimaging studies of the development of cognitive control. Invited lecture at the Senior Vice Chancellor’s Research Seminar; 2007 Mar; Pittsburgh, PA.
30. Developmental changes in brain processes supporting the maturation of cognitive control: fMRI studies using oculomotor tasks. Guest lecturer at the Centre for Neuroscience Studies Seminar Series, Hosted by Queens University; 2007 Mar; Kingston, Ontario, Canada.
31. The Adolescent Brain. Invited Speaker. Pitt Honors College. School of Medicine, University of Pittsburgh; 2007 Mar; Pittsburgh, PA.
32. La Adolescencia y el Cerebro: *Estudios de Neuroimagen Funcional sobre el Desarrollo del Control Cognitivo.*  Invited speaker Department of Psychiatry, School of Medicine. Universidad Catolica de Chile; 2007 Apr; Santiago, Chile.
33. Adolescent brain mechanisms reflect a period of precarious voluntary control of behavior. Invited Lecture at the Two-day Expert Meeting: Risks and Opportunities in Adolescent Brain Development, Hosted by Leiden University; 2007 Jun; The Netherlands.
34. Brain processes underlying the maturation of cognitive control. Invited Speaker Neuroscience Talk. Hosted by Massachusetts Institute of Technology *The Moore Lab*; 2007 Sep;Boston, MA.
35. Brain development and decision making: Maturational determinants of morality. Invited Speaker, Neuroscience Talk. Hosted by Massachusetts Institute of Technology; 2007 Sep; Boston, MA.
36. Maduracion cognitive en la adolescencia. Invited speaker 3ra Reunion Anual de la Sociedad Chilena de Neurociencia enal Simposio “Enfoques funcionales al desarrollo cognitivo y sus desordenes”; 2007 Sep; Los Andes, Chile.
37. Changes in brain processes underlying the maturation of cognitive

control through adolescence. Invited Seminar Speaker, Penn State Neuroscience Institute. Hosted by the Penn State Child Study Center; 2008 Apr; University Park, PA.

1. Cognitive & Brain Systems Maturation through Adolescence. NIMH Council Meeting, New Investigators Presentation; 2008 May; Washington, DC.
2. Introducción a la Técnica de la Resonancia Magnética Funcional (RMf). Invited lecturer 6th Annual Congress of the Spanish Society of Psicofisiología: *Investigation in Psicofisiología and Neurociencia Cognitiva and Afectiva*; 2008 Sep; Castellón de la Plana.
3. Estudios de neuroimagen funcional sobre el desarrollo de los procesos de recompensa y el control cognitivo. Invited speaker at the 6th Annual Congress of the Spanish Society of Psicofisiología: *Investigation in Psicofisiología and Neurociencia Cognitiva and Afectiva*; 2008 Sep; Castellón de la Plana.
4. Immaturities of the Adolescent Brain and Voluntary Control. Invited Seminar Speaker. Judicial Seminar on Emerging Issues in Neuroscience. Hosted by the American Association for the Advancement of Science, National Judicial College, National Center for State Courts, and the Dana Foundation; 2009 May; Reno, NV.
5. Methodological Approaches in Oculomotor Studies Assessing Adolescent Immaturities in Voluntary Response Inhibition. Invited Seminar Speaker. Workshop Developmental Neuroimaging. Hosted by Leiden University *The Leiden Brain and Development Lab and The Utrecht Niche Lab*; 2009 May;Amsterdam, Netherlands.
6. Maturation of brain systems underlying the development of cognitive control from childhood to adulthood. Invited Seminar Speaker. International Meeting of the “Fundación Cerebro y Mente” on “Staging Neuropsychiatric Disorders: Implications for Etiopathogenesis and Treatment”; 2009 Oct; Mojacar, Spain.
7. Immaturities in Brain Processes Underlying Adolescent Executive Function. Meet the PI Lecture. WPIC; 2009 Nov; Pittsburgh, PA.
8. fMRI and DTI Approaches for Characterizing Development in Brain Processes Underlying Executive Function. University of Pittsburgh Honors College Lecture in Functional Imaging. 2010 Apr; Pittsburgh, PA.
9. Immaturities in Voluntary Responses and Incentive Processing in Adolescence: Implications to Juvenile Law. Invited Lecturer. Law & Biology Speaker Series. Hosted by Vanderbilt University Law School; 2010 Apr; Nashville, TN.
10. Neuroimaging Evidence of Immaturities in Cognitive Control, Reward Processing, and Brain Connectivity During Adolescence. University of Pittsburgh Department of Neurobiology Seminar; 2010 May; Pittsburgh, PA.
11. What fMRI and DTI have told us about Immaturities in Brain Processes Underlying Adolescent Executive Function. The Multimodal Neuroimaging Training Program CNBC Summer Workshop; 2010 July; Pittsburgh, PA.
12. Brain System Immaturities in Adolescent Cognitive Control and Reward Processing. University of Cincinnati Colloquium. Invited Speaker; 2010 Oct; Cincinnati, OH.
13. Neuroimaging Evidence of Immaturities in Brain Processes Underlying Cognitive Development in Adolescence. University of Pittsburgh Translational Neuroscience Program Seminar; 2010 Nov; Pittsburgh, PA.
14. Development of Brain Systems/Neural Correlates: Current state-of-the-science advances in the field10-20 years. Georgia State University Colloquium. Invited Speaker; 2011 Feb; Atlanta, GA.

1. Maturation of Functional Specificity and Functional integration in Reward Processing. Reward and Regulation in Adolescence Colloquium at Brock University. Invited speaker; 2011 Jun; Ontario, Canada.
2. Later Development of Cognitive Control: Adolescence. Summer Institute in Cognitive Neuroscience at University of California Santa Barbara. Invited speaker; 2011 Jun; Santa Barbara, CA.
3. Adolescent Risk Taking: Immaturities in Cognitive Control and Reward Processing. The Neuroscience of Risky Decision Making at Cornell University. Invited Speaker; 2011 Sep; Ithaca, NY.
4. Immaturities in Voluntary Responses and Incentive Processing in Adolescence: Implications to Juvenile Law. Invited Speaker; Developmental Discussion Group (DDG) at Carnegie Mellon University, 2011 Sep; Pittsburgh, PA.
5. Specialization of Brain Processes Supporting Cognitive Control through Adolescence. University of South Carolina. Colloquium Speaker; 2011 Oct; Columbia, SC.
6. Does Brain Development Promote Risk Behavior in Emerging Adulthood—or Not? Society for the Study of Emerging Adulthood (SSEA) and the Society for the Study of Human Development (SSHD). Invited Speaker; 2011 Oct; Providence, RI.
7. Maturation of Brain Dynamics Underlying Cognitive Control through Adolescence. The Sackler Institutes for Developmental Psychobiology. Invited Speaker; 2012 March; New York, NY.
8. What Can Brain Studies Tell Us About Adolescent Behavior. Tri-Beta, the Biological Sciences Honor Society, University of Pittsburgh. Invited Speaker; 2012 April; Pittsburgh, PA.
9. Scientific Advances in Adolescent Brain Development and Implications for Primary Care. Conference to Develop a Research Agenda for an Adolescent-Centered Model of Primary Care (National Alliance to Advance Adolescent Health). Invited Speaker; 2012; Washington D.C.
10. Maduración Cerebral Funcional: Vulnerabilidades y Oportunidades. INTA - Instituto de Nutrición y Tecnología de los Alimentos. Invited Speaker; 2012 December ; Santiago, Chile
11. Brain Basis of the Development of Cognitive Control Through Adolescence. Institute of Cognitive Neuroscience, University College of London. Invited Speaker; 2013; London, UK.
12. Adolescent Brain Development and its Implications for Primary Care: Vulnerabilities and Opportunities. Society for Adolescent Health and Medicine 2014 Gallagher Lecture. Invited Speaker; 2014; Austin, TX.
13. Age related changes in brain functional specificity and integration underlying cognitive development. Developmental Colloquium Series; Washington University. Invited Speaker; 2014; St. Louis, MO.
14. Functional Specificity and Integration of Brain Processes underlying Cognitive Development. New York University; Invited Speaker; 2014; New York City, NY.
15. The State of the Adolescent Brain: Implications to Juvenile Law. Squandered Resources Symposium, Johns Hopkins Urban Health Institute. Invited Speaker; 2014; Baltimore, MD.
16. Adolescent Brain Development: Vulnerabilities and Opportunities. Director Research Circle, University of Texas Southwestern Medical Center. Invited Speaker; 2014; Dallas, TX.
17. Brain Dynamics Underlying Cognitive Development through Adolescence. Behavioral and Brain Sciences Colloquium. Invited Speaker; 2014; Dallas, TX.
18. Neurodevelopmental trajectories of brain function and connectivity as risk factors for internalizing and externalizing psychopathology. American College of Neuropsychopharmacology (ACNP), 53rd Annual Meeting. Invited Speaker, 2014; Phoenix, AZ.
19. Neuroimaging: Discoveries from Fetus to Adult. The American Association for the Advancement of Science (AAAS), 2015 Annual Meeting. Symposium Speaker; 2015; San Jose, CA.
20. Adolescent Brain Development and Its Implications for Adolescent and Child Health: Vulnerabilities and Opportunities. Division of Adolescent and Young Adult Medicine. Invited Speaker, 2015; Pittsburgh, PA.
21. Vulnerabilities and Opportunities in Adolescent Brain Development: Implications to Adolescent Health. Adolescent Health Initiative, 2015 Conference on Adolescent Health. Invited Speaker, 2015; Ypsilanti, Michigan.
22. Integration of FEF Supporting Development of Cognitive Control. Gordon Research Conferences: Eye Movements. Invited Speaker, 2015; Waltham, MA.
23. Towards Healthy Adolescent Trajectories (THAT). Speaker, 2015. Pittsburgh, PA.
24. Longitudinal Studies of Cognitive Maturation: Flux: The International Society for Integrative Developmental Cognitive Neuroscience, Speaker, 2015. Leiden, NL.
25. Creating the Brain through Adolescence. Thrival Innovation Festival. Invited Speaker, 2015. Pittsburgh, PA.
26. Adolescent Brain Development and Implications for Adolescent health. Ohio Valley Regional Chapter of the Society for Adolescent Health and Medicine (OVSAHM) Invited Speaker, 2015. Pittsburgh PA.
27. Brain Systems Underlying Working Memory Maturation: A longitudinal Study. PAL Psychology Department, Carnegie Mellon University, Invited Speaker. 2015, Pittsburgh PA.
28. Working Memory and Adolescent Cannabis Use. The Center for Children and Families, Florida International University, Invited Speaker. 2016, Miami, Florida.
29. The development of convergent corticostriatal structural connectivity during adolescence. The Center for Mind and Brain, University of California, Davis, Invited Speaker. 2016, Davis, California.
30. The Emergence of Collaborative Brain Function Underlying Cognitive Development through Adolescence. Mahoney Institute for Neurosciences Colloquium Series, University of Pennsylvania, Invited Speaker. 2016, Philadelphia, PA.
31. The Adolescent Brain: A Second Window of Opportunity. Adolescent neuroscience and the opportunity for positive engagement roundtable, UNICEF. Invited Speaker. 2016, New York, NY.
32. The Adolescent Brain. Staunton Farm Foundation Board of Directors Meeting. Invited Speaker. 2016, Pittsburgh, PA.
33. From Base Camp to the Summit: Understanding Adolescent Brain Trajectories. Department of Psychiatry Lecture Series, Meet the PI Lecture. University of Pittsburgh. Invited Speaker. 2016, Pittsburgh, PA.
34. Exploratory Brain Processes Underlie the Transition from Adolescence to Adult Cognitive Control. Richard B. Millward Lecture, Brown University CLPS Department. Invited Speaker. 2016, Brown University.
35. Adolescent Specialization of Brain Systems Underlying Cognitive Maturation. Sackler Institute of Developmental Psychobiology Cornell Medical School, Invited Speaker. 2016, New York, NY.
36. Your Brain on Adolescence. Senior Science class. Pittsburgh Science and Technology Academy, Pittsburgh Public Schools. Invited Speaker. 2016, Pittsburgh, PA.
37. Especialización de Sistemas Cerebrales Subyacentes a la Maduración Cognitiva en la Adolescencia. Pontifica Universidad Catolica, Department of Neuroscience. Invited Speaker. 2017, Santiago, Chile.
38. Marihuana y el Cerebro Adolescente. Pontifica Universidad Catolica, Public Talk. Invited Speaker. 2017, Santiago, Chile.
39. Neuroimaging Methods. Pontifica Universidad Catolica, Department of Chemistry. Invited Speaker. 2017, Santiago, Chile.
40. Changes in Brain Processing Underlying Adolescent Cognitive Development. Neuroscience Seminar. Invited Speaker. 2017, Queens University. Kingston, ON.
41. Adolescent Brain Development: Implications for the Juvenile Criminal Justice Systems. Pennsylvania Conference of State Trial Judges. Concurrent Sessions: The New Science Regarding Adolescence: Juvenile Brains & Juvenile Offenders. Invited Speaker. 2017. Pittsburgh, PA.
42. Exploring the Sculpting of the Adolescent Brain: Neuroimaging Studies of Cognitive Maturation. Provost Inaugural Lecture. Honorary Speaker. 2017. Pittsburgh, PA.
43. Changes in the Integrations of Brain Processes Supporting the Transition from Adolescent to Adult Level Cognitive Control. Cognitive Neuroscience Society 24th Annual Meeting. Invited Symposium 4 Brain Network Specialization Through Adolescence Supporting Stabilization of Cognitive and Affective Brain Systems. Invited Chair. 2017, San Francisco, CA.
44. Adolescent Brain Development. Youth Research Advisory Board Think, Act, Grow® (TAG) Talks series, Adolescent Health, UPMC. Invited Speaker. 2017, Pittsburgh, PA.
45. Adolescent Neurocognitive Maturation. The Icahn School of Medicine at Mount Sinai (ISMMS), Mount Sinai Adolescent Health Center (MSAHC), Institute for the Study of Adolescence and Young Adulthood. Invited Speaker. 2017, New York, NY.
46. Adolescent Neurocognitive Maturation. Neuroscience Summer Undergraduate Program. Center for Neuroscience, University of Pittsburgh. Invited Speaker. 2017, Pittsburgh, PA.
47. Human Subjects Research. Graduate Student Seminar. Center for Neuroscience, University of Pittsburgh. Invited Speaker. 2017, Pittsburgh, PA.
48. Adolescent Neurocognitive Development. Cognitive Brown Bag Series. Learning Research & Development Center, University of Pittsburgh. Invited Speaker. 2017. Pittsburgh, PA.
49. The Critical Importance of the Adolescent Stage of Brain Development. CMU BrainHub Conference. Brain Hub, Carnegie Mellon University. Invited Speaker. 2017. Pittsburgh, PA.

# OTHER RESEARCH ACTIVITIES:

NIH

1. Study Section Member, *Cognition and Perception*, National Institutes of Health (NIH). Center for Scientific Review (2006, July – 2010, June).
2. Member, *Advisory Committee to the Director (ACD)*, National Institutes of Health (NIH) (2008, August – 2012, December).
3. Member, Board of Scientific Counselors (BSC), National Institute of Mental Health (NIMH), (2012, July – 2017, June)
4. Member, Blue Ribbon Panel (BRP), National Institute on Drug Abuse (NIDA), (2013, March ­– 2014, January)
5. Member, *Advisory Board to Avniel Ghuman, R01 Inside the Social Perception Network: Dynamics, Connectivity and Stimulation,* National Institutes of Mental Health (NIMH), (2016)
6. Member, *Advisory Board to Moriah Thomason, R01 In Utero Assessment of the Human Neural Connectome and Later Child Behavior,* National Institutes of Mental Health (NIMH), (2016)

Other:

1. Public Advocate, American Psychological Association's 5th annual *Science Leadership Conference* (SciLC), Enhancing the Nation's Health through Psychological Science (September 3, 2009).
2. Discussion participant with UCSD Research Ethics Program (March 2010).
3. Informed APA and AMA briefs regarding the developmental neuroscience evidence relevant to the juvenile sentence of Life Without Parole presented to the *Supreme Court* (November 2009).
4. Reviewer, CTSI NIH Clinical and Translational Science (2012
5. Ad-hoc Journal Reviewer:
	1. Progress in Neuropsychopharmacology (1998)
	2. Biological Psychiatry (1998 – 2000, 2008)
	3. Journal of Gerontology (1999)
	4. Journal of Autism and Developmental Disorders(2000)
	5. NeuroImage (2000)
	6. Journal of Neuroscience (2001)
	7. Psychophysiology (2001)
	8. Journal of Neurophysiology (2002)
	9. Cerebral Cortex (2002-2005)
	10. Archives of General Psychiatry (2003)
	11. Journal of Experimental Child Psychology (2003)
	12. Developmental Science (2003)
	13. Human Brain Mapping (2003)
	14. Neuropsychology (2004)
	15. Journal of Child Psychology and Psychiatry (2004)
	16. International Journal of Neuropsychopharmacology (2004)
	17. Developmental Psychology (2004)
	18. Trends in Cognitive Sciences (2004)
	19. Developmental Brain Disorders (2004)
	20. Brain (2004)
	21. Cognition and Perception (2005)
	22. Neuropsychologia (2005)
	23. Journal of Cognitive Neuroscience (2005)
	24. Cognitive Brain Research (2005)
	25. Current Directions for Psychological Science (2005)
	26. Experimental Brain Research (2005)
	27. Neuroscience Letters (2006)
	28. Child Development (2006)
	29. Frontiers in Human Neuroscience (2007)
	30. Nature Reviews Neuroscience (2007)
	31. Psychological Science (2008)
	32. Consulting Board of the Psychology Bulletin (2008)
	33. Proceedings of the National Academy of Sciences of the United States of America (2008)
	34. Development and Psychopathology (2010)
	35. American Journal of Psychiatry (2010)
	36. Frontiers in Human Neuroscience (2010)
	37. Neuron (2010)
	38. SRCD Child Development Perspectives (2011)
6. Ad-Hoc Grant Reviewer
7. National Institutes of Health:
	* 1. Ad Hoc Reviewer: Scientific Review Branch/NINDS – “Randomized Indomethacin GMH/IVH Prevention Trial” (1999, June)
		2. Reviewer NIH: CSR Special Emphasis Panel (ZRG1 BDCN-Brain Disorders and Clinical Neurosciences) RFA NIH initiative "Neuroimaging technology development to assess brain and behavior in pediatric populations" (2002, June)
		3. Ad Hoc Reviewer: The Developmental Brain Disorders [DBD] Study Section NIH (2004, November)
		4. Ad Hoc Reviewer: Cognition and Perception [CP] Study Section NIH (2005, February, November)
		5. Participant - NIMH Council Work on MRI Research Practices Meeting in Bethesda, Maryland (2005, September)
8. National Science Foundation (2002, July)
9. National Institute on Drug Abuse (2002, July)

Other:

1. Medical Research Council of England (1999, September)
2. Health Research Board in Ireland (2003, January)
3. New York University Whitehead Fellowships for Junior Faculty in Biomedical and Biological Sciences (2004, April)
4. San Antonio Life Sciences Institute (2005, August)

# Media:

1. Television Nacional De Chile Enlaces - Adolescencia: La tormenta del crecimiento Brain maturation and changes in behavior (2002)
2. Radiology (2002)
3. Evans, J (2003, December) Brain studies spotlight origins of self-control *Pediatric News*, 37, 22
4. Beckman, M (2004, July 30) Crime culpability and the adolescent brain *Science*, 305, 596-599
5. Raeburn, P (2004, October 17) Too immature for the death penalty? *The New York Times Magazine*, Section 6, Page 26, Column 1
6. Gottlieb, D (Host), Restak, R (Guest Speaker), & Luna, B (Guest Speaker) (2004, November 1) The new brain [Radio Program Broadcast] In *Voices in the Family* Philadelphia: WHYY-91FM
7. Brain’s ‘working memory’ expands with age (2004, November 1) *The Pittsburgh Post Gazette* A12
8. Laidman, J (2004, November 1) Forget it – stress is to blame If you’re having a bad day, memory lapses are more common *The Toledo Blade*
9. Malcom, L (Host), Gur, R (Guest Speaker), & Luna, B (Guest Speaker) (2004, November 13) Rebels and the cause – The adolescent brain [Radio Program Broadcast] In *All in the Mind* Australia: ABC Radio National
10. Glaser, G (2005, February 21) Teens’ brains not fully wired for a reason *The Oregonian*
11. Collins, M (Host), Luna, B (Guest Speaker) (2005, August 11) [Radio Program Broadcast] In *Charlotte Talks with Mike Collins* North Carolina WFAE 907FM
12. Wald, C (Producer), Luna, B (Guest Speaker) (2005, December 1) [Radio Program Broadcast] In *Science Update Radio Program* Washington, DC
13. Sabbagh, L (2006, August/September) The teen brain, hard at work No really *Scientific American Mind*, 20-25
14. Powell, K (2006, August 24) How does the teenage brain work? *Nature News Feature*, 442, 865-867
15. Templeton, D (2006, November 29) Teenagers’ brains are still under construction *Pittsburgh Post-Gazette*
16. Lustig, R (Producer), Luna, B (Guest Speaker) (2006, December 7) [Radio Program Broadcast] In *Generation Next Daily Documentary,* BBC’s World News
17. Miksch, J (2006) FBI Calling *PITTMED* University of Pittsburgh School of Medicine Magazine 8(4), 3
18. Monastersky, R (2007, January 12) Who’s minding the teenage brain? Scientists find clues to why adolescents seek out and find trouble In *The Chronicle of Higher Education*
19. O*xygen* *Mentors: Bringing Along the Next Generation* [a public affairs campaign which provides mentoring to women nationwide] (2007)
20. Bernardini, B (5 July 2007) SuperQuark Science TV program RAI 1, European Cable *Scientific Advances*
21. Vitone, E (Fall 2007) “What Possessed You?” *PITTMED* University of Pittsburgh School of Medicine Magazine
22. National Press Club Juvenile Sentence of Life without Parole November 2009, Washington DC
23. Vitone, E (Fall 2010) “Mars and Venus Revisited” *PITTMED* University of Pittsburgh School of Medicine Magazine
24. Slomski, A (Fall 2010) Crazy Kids *Proto: Dispatches from the Frontiers of Medicine,* 27-33
25. Luna B (Jan 21, 2011) Understanding Voluntary Behavior *New York Times, Opinion Pages*
26. Baum, M (23 May 2011) Action Potential: Probing the Brain Power of Pitt Neuroscience, 4-5 Pitt Chronicle
27. Dobbs, D (Oct 2011) Beautiful Brains. National Geographic Magazine, 36-59
28. Taylor, Sarah. (Producer), Luna, B. (Guest Speaker). (2011, October 5) [Radio Program Broadcast]. In *The Regina Brett show,* WKSU 89.7.
29. Shiely, Kyle. (Producer), Luna, B. (Guest Speaker). (2011, October 9) [Radio Program Broadcast]. In *News and Views,* WCCO 830.
30. Smith, Jonathan. (producer), Luna, B. (Guest Speaker). (2011, October 12) [Radio Program Broadcast]. In *Word of Mouth*, NHPR.
31. Townsend, Melissa. (producer) Luna, B. (Guest Speaker). (2011, October 12) [Radio Program Broadcast]. In *Midmorning*, Minnesota Public Radio.
32. Landau, Elizabeth. (Oct 2011) Why Teens are Wired for Risk. CNN.com.
33. Sherman, Carl. (Oct. 2012) A Delicate Balance: Risks, Rewards, and the Adolescent Brain. *The Dana Foundation*.
34. Chedd, Graham. PBS Special (Sept. 2013) Brains on Trial with Alan Alda.
35. Burrows, Thomas (15 February 2015) Kidults are the new teens: People in their 20s are affected by adolescent hyper activity and don’t become proper grown-ups until 25, say scientists. *Daily Mail.*
36. Byko, Laura (15 February 2015) Don’t blame the teenage brain for risk-taking. *Pittsburgh Post-Gazette.*
37. Tufft, Ben (15 February 2015) Adulthood begins at 25, says new research. *The Independent.*
38. Radowitz, John von (15 February 2015) We’re ‘kidults’ in our 20s, research shows. Press Association. *MSN.*
39. Fathima, Afza Kandrikar (17 February 2015) ‘Kidults’: Teenage Hyper-Activity Continues Until Mid-20s. *International Business Times.*
40. Pinsky, Drew. Dr. Drew Midday Live with Mike Catherwood (18 February 2015)[Radio Program Broadcast]. *KABC Talk Radio.*
41. Bambury, Brent. Day 6 (21 February 2015) Kidults: Does delaying responsibility affect our brains? [Radio Program Broadcast].*CBC Radio.*
42. Rousseau, Alex. (Researcher) The Right Hook (20 February 2015) [Radio Program Broadcast]. *Newstalk Radio, Dublin.*

# LIST of CURRENT RESEARCH INTERESTS:

1. Characterizing the changes in brain function that subserve the maturation of higher-order cognition (executive, emotion, social) from late childhood through adolescence in normal development
2. Neural bases of impairments in the development of cognition and object processing in typical participants and those diagnosed with autism
3. Delineating brain circuitry underlying higher-order cognition including networks for voluntary response suppression, spatial working memory, and planning of anticipated motor responses and object processing
4. Effects of reward and motivation on cognitive control of behavior through adolescence
5. Effects of cannabis on prefrontal systems supporting working memory
6. Neurobiology of psychiatric illness in epilepsy
7. Cognitive control and Attention Deficit and Hyperactivity Disorder (ADHD)
8. Cognitive control and substance abuse in adolescence

# SERVICE:

##  University of Pittsburgh Medical Center / Western Psychiatric Institute & Clinic:

1. Co-Director, Neurobehavioral Studies Program (1998 - 2002)
2. Reviewer for WPIC Research Committee (1998 - Present)
3. Neuroscience, Clinical, and Translational Research Center Scientific Advisory Committee (1999 - Present)
4. Director of the Laboratory of Neurocognitive Development (2000- Present)
5. Pilot Imaging Project (PIP) Review Committee (2003- Present)
6. MR Advisory Committee (2003- Present)
7. Academic Promotions Committee (2009-present)
8. Development of Cortico-limbic Circuitry Recruitment Group (2010-present)
9. Faculty Search Committee (2010-present)
10. WPIC Research Day Planning Committee (2011-present)
11. K-Award Mentor Committee (2011-present)
12. Neurology of Neurological Disease T32 Training Grant Advisory Committee (2014-Present)

##  Community Activities:

1. Lectureship – *Neurobiological Basis of Psychopathology,* Mercy Behavioral Health Outpatient Staff, Pittsburgh, PA (1999)
2. Lectureship – *The Human Brain,* Liberty Elementary School, Pittsburgh, PA (2000)
3. Guest Speaker – *Fight for Lifers West (FFLW) Adolescents with life sentences Meeting,* Thomas Melton Center, Pittsburgh PA (2006, December 16)
4. Member, Board of Directors – Planned Parenthood of Western Pennsylvania (2007-Present)
5. Provided Expert Testimony – Senate Judiciary Public Hearing on Juvenile Lifers, Senator Greenleaf, Harrisburg, PA (2008, September 22)
6. Guest Speaker, Judicial educational seminar on Emerging Issues in Neuroscience (May 2009)
7. Guest Speaker – *What are they Thinking? Why Adolescent Kids do Stupid Things,* Keynotes National Council of Jewish Women’s Annual Meeting, Tree of Life Congregation, Squirrel Hill, PA (2009, April 26)
8. Provided assistance in APA and AMA briefs regarding the juvenile sentence of Life Without Parole presented to the *Supreme Court* (November 2009)
9. Guest Speaker - Pittsburgh Community Cinema at WQED screening of *Me Facing Life: Cyntoia's Story* Pittsburgh, PA (2011, Feb 10)
10. Guest Speaker - *What can brain studies tell us about adolescent behavior?* Pittsburgh School for the Creative and Performing Arts (CAPA), Pittsburgh, PA (2011, November 8)
11. Panelist – Law and Policy of the Developing Brain: Neuroscience from Womb to Death Conference. University of California Hastings College of the Law, San Francisco, CA (2012, February 9-11)
12. Guest Speaker – *What can brain studies tell us about adolescent behavior?* Pittsburgh Allderdice High School, Pittsburgh, PA (2012, March 8)
13. Scholarly Discussion Panelist – Lantern Theater Company, Philadelphia, PA (2012, March 12)
14. Guest Speaker-*What are they thinking? Learning about learning, A Speaker Series for Parents. Your Child’s Brain Explained,* Winchester Thurston School, Pittsburgh, PA (2015, January 20)