

CURRICULUM VITAE
University of Pittsburgh
School of Medicine

BIOGRAPHICAL

Name: Beatriz Luna, Ph.D.

E-Mail Address: lunab@upmc.edu

Business Address:

Western Psychiatric Institute & Clinic
University of Pittsburgh Medical Center
Loeffler Building
121 Meyran Avenue
Suite 100
Pittsburgh, PA 15213

Business Phone: (412) 383-8167

Business Fax: (412) 383-8179

EDUCATION and TRAINING

UNDERGRADUATE:

1980-1984	American University, Washington, DC	B.A. (1984)	Psychology
-----------	--	-------------	------------

GRADUATE:

1984-1985	Duquesne University Pittsburgh, PA	M.A. (1985)	Clinical Psychology
1988-1996	University of Pittsburgh Pittsburgh, PA	Ph.D. (1996)	Developmental Psychology Advisor: Velma Dobson, Ph.D.

POST DOCTORAL TRAINING:

1995-1997	Western Psychiatric Institute & Clinic Pittsburgh, PA	Neurobehavioral Studies Mentor: John A. Sweeney, Ph.D.
-----------	--	---

APPOINTMENTS and POSITIONS

ACADEMIC:

1997-2000	University of Pittsburgh School of Medicine	Visiting Research Assistant Professor of Psychiatry
-----------	--	--

	Department of Psychiatry Pittsburgh, PA	
2000-2001	University of Pittsburgh School of Medicine Department of Psychiatry Pittsburgh, PA	Research Assistant Professor of Psychiatry
2000- Present	University of Pittsburgh and Carnegie Mellon University Center for Neural Basis of Cognition Pittsburgh, PA	Faculty
2001-2002	University of Pittsburgh School of Medicine Department of Psychiatry Pittsburgh, PA	Assistant Professor of Psychiatry
2002- Present	University of Pittsburgh Medical Center Western Psychiatric Institute and Clinic Laboratory of Neurocognitive Development Pittsburgh, PA	Founder and Director
2002-2008	University of Pittsburgh School of Medicine Department of Psychiatry Pittsburgh, PA	Associate Professor of Psychiatry <i>Primary Appointment</i>
2003- 2011	University of Pittsburgh Department of Psychology Pittsburgh, PA	Associate Professor of Psychology <i>Secondary Appointment</i>
2005-Present	Center of Neuroscience University of Pittsburgh Pittsburgh, PA	Training Faculty
2008-2011	University of Pittsburgh School of Medicine Department of Psychiatry Pittsburgh, PA	Associate Professor of Psychiatry with Tenure <i>Primary Appointment</i>

2011- Present	University of Pittsburgh School of Medicine Department of Psychiatry Pittsburgh, PA	Professor of Psychiatry <i>Primary Appointment</i>
2011- Present	University of Pittsburgh Department of Psychology Pittsburgh, PA	Professor of Psychology <i>Secondary Appointment</i>
2013- Present	Children's Hospital of Pittsburgh of UPMC Pittsburgh, PA	Professor of Pediatrics <i>Secondary Appointment</i>

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
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 Science	2009-Present

HONORS

Phi Kappa Phi Honor Society	1984
Best Psychology Student of 1984	1984
Top Ten Women in the Arts and Sciences	1984

Magna Cum Laude	1984
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 31 st 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

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. PubMed 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. PubMed 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. PubMed 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. PubMed 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. PubMed 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. PubMed 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. PubMed 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. PubMed 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. PubMed 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. PubMed 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. PubMed 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. PubMed 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. PubMed 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. PubMed 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. PubMed 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. PubMed 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. PubMed 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. PubMed 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. PubMed 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. PubMed 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. PubMed 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. PubMed PMID: 15369519
25. **Luna B**. Algebra and the adolescent brain. *Trends Cogn Sci*. 2004 Oct;8(10):437-9. PubMed 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. PubMed 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. PubMed 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. PubMed 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. PubMed 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. PubMed PMID: 15907952
31. Asato MR, Sweeney JA, **Luna B**. Cognitive processes in the development of TOL performance. *Neuropsychologia*. 2006;44(12):2259-69. PubMed 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. PubMed 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. PubMed PMID: 16909311
34. Geier CF, Garver KE, **Luna B**. Circuitry underlying temporally extended spatial working memory. *Neuroimage*. 2007 Apr;35(2):904-15. PubMed 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. PubMed 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. PubMed 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. PubMed 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. PubMed 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. PubMed PMID: 18422548
40. Velanova K, Wheeler ME, **Luna B**. Maturation changes in anterior cingulate and frontoparietal recruitment support the development of error processing and inhibitory control. *Cereb Cortex*. 2008 Nov;18(11):2505-22. PubMed 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. PubMed PMID: 18954478
42. Geier CF, Garver K, Terwilliger R, **Luna B**. Development of working memory maintenance. *J Neurophysiol*. 2009 Jan;101(1):84-99. PubMed 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. PubMed 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. PubMed 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. PubMed 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. PubMed PMID: 19812330
47. 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. PubMed PMID: 20631857
48. 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. PubMed PMID: 19875675
49. 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. PubMed PMID: 20347061
50. Asato MR, Terwilliger R, Woo J, **Luna B**. White matter development in adolescence: a DTI study. *Cereb Cortex*. 2010 Sep;20(9):2122-31. PubMed PMID: 20051363
51. 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. PubMed PMID: 20813119
52. 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. PubMed PMID: 21084608. *Recipient of the Tim Post Award for outstanding article by a graduate student*
53. Andrews JS, Ben-Shachar M, Yeatman JD, Flom LL, **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. PubMed PMID: 19747208
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. PubMed PMID: 21087246
55. 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. PubMed PMID: 21195100
56. 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. PubMed PMID: 21254449
57. 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. PubMed PMID: 21316875

58. 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. PubMed PMID: 21115229
59. 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. PubMed PMID: 21477194
60. 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. PubMed PMID: 21257673
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. PubMed PMID: 21974237
62. 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. PubMed PMID: 21966352
63. 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. PubMed PMID: 21849240
64. Geier CF, **Luna B**. Developmental effects of incentives on response inhibition. *Child Dev.* 2012 Jul-Aug;83(4):1262-74. Pubmed 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. PubMed PMID: 22281210
66. Hwang K, Hallquist MN, **Luna B**. The development of hub architecture in the human functional brain network. *Cereb Cortex.* 2012 Aug. [Epub ahead of print]. PubMed PMID: 22875861
67. 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. PubMed PMID: 22480696
68. 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. PubMed PMID: 22803787
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.. PubMed 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 Neurosci.* 2012;6:80. PubMed 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 Mar 22. [Epub ahead of print] PubMed PMID: 23519375
 72. Perlman SB, **Luna B**, Hein TC, Huppert TJ. fNIRS Evidence of Prefrontal Regulation of Frustration in Early Childhood. *Neuroimage.* 2013 April 25. PubMed 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. PubMed PMID: 23704934
 74. 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, Keyzers 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.* 2013 Jun 18. PubMed PMID: 23774715
 75. 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. PubMed PMID: 23747457
 76. **Luna B**, Paulsen DJ, Padmanabhan A, Geier C. The Teenage Brain: Cognitive Control and Motivation. *Current Directions in Psychological Science*, 2013 April 22(2):94-100. doi: 10.1177/0963721413478416
 77. Padmanabhan A, **Luna B**. Developmental Imaging Genetics: Linking dopamine function to adolescent behavior. *Brain and Cognition: Special issue on reward and regulatory processes in adolescence (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. PubMed 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 PubMed PMID: 22449636
16. **Luna B**. The Relevance of Immaturities in the Juvenile Brain to Culpability and Rehabilitation. *Hastings Law Rev*. 2012;63:1469-1486.

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, Behrmann 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 comorbidities 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: Il 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 Meetingl 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 Meetingl 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 corito-striatal-thalamic connectivity in relation to spatial working memory capacity in children with ADHA. Poster Session Presented at the 2011 Society for Neurosciene Annual Meeting; 2011 Nov; Washington DC.
115. Hallquist MN, Geier CF, **Luna B**. Development of functional brain networks supporting reward proceesing and inhibitory control. Poster Session Presented at the 2011 Society for Neurosciene 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 Neurosciene 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 Neurosciene 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.

MONOGRAPHS, BOOKS, AND BOOK CHAPTERS:

1. Minschew 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.

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**. Neurobiologic 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, Vaisleb 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.

PROFESSIONAL ACTIVITIES

TEACHING:

1994	Psychology University of Pittsburgh	<i>Infancy: The first Two Years of Life</i> : Advanced undergraduate psychology course – Full semester
1998 -	Psychology University of Pittsburgh	<i>Seminar in Developmental Psychology (Brain Maturation and Late Cognitive Development)</i> : Advanced graduate psychology course – 3 hour seminar
1998 - Present	Psychology University of Pittsburgh	<i>Brown Bag Series (in Developmental Psychology)</i> : Graduate students – 1 hour seminar
2000	School of Medicine University of Pittsburgh	<i>Research Survival Skills (Preparing an R01)</i> : M.D. and Ph.D. Postdoctoral Fellows – 2 hour seminar
2001- 2008	School of Medicine University of Pittsburgh	<i>Neuroimaging in Psychiatric Illness</i> 3 rd year Medical Students – 1 hour lecture

2002	School of Medicine University of Pittsburgh	<i>Research Survival Skills (Family and Work):</i> M.D. and Ph.D. Postdoctoral Fellows – 2 hour seminar
2004 - Present	Biological Sciences Carnegie Mellon University	<i>Lecture (Magnetic Resonance Imaging in Neuroscience):</i> Undergraduate and Graduate Students – 1.5 hour lecture
2006	Neurobiology University of Pittsburgh	<i>Proseminar Lecture (Changes in Brain Function Supporting the Maturation of Cognitive Control: Developmental fMRI and Behavioral Studies):</i> Neuroscience Graduate Students – 3 hour lecture
2006	School of Medicine Neurobiology University of Pittsburgh	<i>Research Survival Skills and Ethics Workshop (Writing Research Articles):</i> M.D. and Ph.D. Postdoctoral Fellows – 2 hour seminar
2007	School of Medicine University of Pittsburgh, Honors College	<i>Lecture (Functional MRI):</i> Undergraduate students – 1.5 hour lecture; Biomedicine: Past, Present & Future, MED 2101
2009	Department of Medicine and Neurobiology University of Pittsburgh	<i>Research Survival Skills and Ethics Workshop (Grant Writing):</i> M.D. and Ph.D. Postdoctoral Fellows – 2 hour seminar
2010	Department of Psychology, University of Pittsburgh	<i>Lecture (Immaturities in Brain Processes Underlying Adolescent Executive Function):</i> Undergraduate Students – 1.5 hour lecture
2010	University of Pittsburgh, School of Medicine, Honors College	<i>Lecture (What fMRI and DTI have told us about Immaturities in Brain Processes Underlying Adolescent Executive Function):</i> Undergraduate students – 1.5 hour lecture; Biomedicine: Past, Present & Future, MED 2101
2011	University of Pittsburgh, School of Medicine, Honors College	<i>Lecture (What fMRI and DTI have told us about Immaturities in Brain Processes Underlying Adolescent Executive Function):</i> Undergraduate students – 1.5 hour lecture; Biomedicine History

MENTORING:

Current:

2008 -	Katerina Velanova, Ph.D.	Assistant Professor, Psychiatry
2009 -	Kirsten O'Hearn, Ph.D.	Assistant Professor, Psychiatry
2010 -	Daniel Simmonds	Graduate Student, Medical Scientist Training Program (MSTP) MD, Ph.D. Neuroscience
2012-	David Paulsen, Ph.D.	Postdoctoral Fellow, Psychology
2012 -	Bart Larsen	Graduate Student, Cognitive Psychology/CNBC
2013 -	Kai Hwang, Ph.D.	Postdoctoral Associate, Psychiatry

2013 -	Aarthi Padmanabhan, Ph.D.	Postdoctoral Associate, Psychiatry
2013-	Scott Marek	Graduate Student, CNUP

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.	Postdoctoral Fellow, Psychiatry
2005 -2012	Miya R. Asato, M.D.	Assistant Professor, Pediatrics/Psychiatry
2006-2009	Kirsten O'Hearn, Ph.D.	Postdoctoral Fellow, Psychology
2006-2007	Andreea Bostan	Graduate Student, Neuroscience/CNBC
2006-2012	Sarah Ordaz	Graduate Student, Clinical Psychology
2006	Jae Woo, M.D	Senior Research Fellow, SOM, 3 rd year
2006	Yemisi Olagunju, M.D.	NIMH Fellow, SOM, 3 rd 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, 3 rd Year
2009-2011	Charles Geier, Ph.D.	Postdoctoral Fellow, Psychology/Psychiatry
2010-2011	David Montez	Hot Metal Bridge Program, Psychology

CO-MENTORING:

Current:

2010 -	Michael Hallquist	Psychiatry - Neuroimaging of Borderline Personality Disorder
2010 -	Susan Perlman	Psychiatry - Neuroimaging of Mood Disorders in Young Children

Past:

2002-2007	Jennifer Wilford	Psychiatry - Prenatal Alcohol Exposure: Cognitive and Brain Function
2007-2012	Dustin Pardini	Psychiatry - Brain Function, Cognitive and Emotional Processing, and Behavioral Dysregulation
2002-2007	Rebecca McNamee	Radiology - fMRI Methods Research in Children at Risk for Drug Abuse

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
2010	Holly Gastgeb	Neuroscience
2010-2011	Emily Merz	Psychology
2011	Courtney Lopresti	Neuroscience – <i>reprint exam</i>

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
2012	Jared Diccico-Bloom	Psychology

RESEARCH:

1. Grant Number (Funded)	<u>Grant Title</u>	<u>Role in Project</u>	<u>Years Inclusive</u>	<u>Source</u>
Current Grant Support:				
5 R01 MH080243	Reward Processing in Adolescence (PI – B. Luna)	Principal Investigator	2008 – 2013	National Institute of Mental Health
1K01 MH082123	The Functional Anatomy of Adolescent ADHD: Defining Markers of Recovery (PI – K. Velanova)	Mentor	2008 – 2013	National Institutes of Mental Health
1K01 MH081191	Development of Ventral Stream Organization (PI – K. O’Hearn)	Mentor	2009 – 2014	National Institutes of Mental Health
5 R01 MH067924	Multimodal Neurodevelopmental Studies of Cognitive Control and Arousal (PI – B. Luna)	PI	2011-2016	National Institutes of Mental Health
PA-HEAL	Reducing the Cognitive Consequences of Cannabis Use by Adolescents (PI – D. Lewis)	PI – Aim 2	2011-2015	PA Department of Health
1 U01 AA021690	National Consortium on Alcohol and Neurodevelopment in Adolescence: Pittsburgh (PI – D. Clark)	Co-I	2012-2017	National Institute on Alcohol Abuse and Alcoholism
1 R21 HD074850	Variability in Brain Function underlying Motivated Behavior in Adolescence (PI – B.	PI	2012-2014	National Institute of Child Health and Human Development

Luna)

Prior Grant Support: (Completed in the last four years)

NAAR-Autism Speaks. Research Project	Development of perceptual processing in autism (PI- B. Luna)	Principal Investigator	2006-2008
R21 DA021028	Frontal White Matter, Executive Function and Treatment Outcomes in Adolescent AUDs (PI- D. Clark)	Co-Investigator	2005-2008
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
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
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

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 Maduración 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: Maturation determinants of morality. Invited Speaker, Neuroscience Talk. Hosted by Massachusetts Institute of Technology; 2007 Sep; Boston, MA.
36. Maduración cognitiva en la adolescencia. Invited speaker 3ra Reunion Anual de la Sociedad Chilena de Neurociencia enal Simposio "Enfoques funcionales al desarrollo cognitivo y sus desórdenes"; 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.
38. Cognitive & Brain Systems Maturation through Adolescence. NIMH Council Meeting, New Investigators Presentation; 2008 May; Washington, DC.
39. 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.
40. 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.
41. 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.
42. 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.

43. 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.
44. Immaturities in Brain Processes Underlying Adolescent Executive Function. Meet the PI Lecture. WPIC; 2009 Nov; Pittsburgh, PA.
45. 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.
46. 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.
47. 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.
48. 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.
49. Brain System Immaturities in Adolescent Cognitive Control and Reward Processing. University of Cincinnati Colloquium. Invited Speaker; 2010 Oct; Cincinnati, OH.
50. Neuroimaging Evidence of Immaturities in Brain Processes Underlying Cognitive Development in Adolescence. University of Pittsburgh Translational Neuroscience Program Seminar; 2010 Nov; Pittsburgh, PA.
51. Development of Brain Systems/Neural Correlates: Current state-of-the-science advances in the field 10-20 years. Georgia State University Colloquium. Invited Speaker; 2011 Feb; Atlanta, GA.
52. 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.
53. Later Development of Cognitive Control: Adolescence. Summer Institute in Cognitive Neuroscience at University of California Santa Barbara. Invited speaker; 2011 Jun; Santa Barbara, CA.
54. 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.

55. 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.
56. Specialization of Brain Processes Supporting Cognitive Control through Adolescence. University of South Carolina. Colloquium Speaker; 2011 Oct; Columbia, SC.
57. 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.
58. Maturation of Brain Dynamics Underlying Cognitive Control through Adolescence. The Sackler Institutes for Developmental Psychobiology. Invited Speaker; 2012 March; New York, NY.
59. 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.
60. 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.
61. Maduración Cerebral Funcional: Vulnerabilidades y Oportunidades. INTA - Instituto de Nutrición y Tecnología de los Alimentos. Invited Speaker; 2012 December ; Santiago, Chile
62. Brain Basis of the Development of Cognitive Control Through Adolescence. Institute of Cognitive Neuroscience, University College London Invited Speaker; 2013; London, UK.

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)

Other:

5. Public Advocate, American Psychological Association's 5th annual *Science Leadership Conference* (SciLC), Enhancing the Nation's Health Through Psychological Science (September 3rd, 2009).
6. Discussion participant with UCSD Research Ethics Program (March 2010).
7. 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).
8. Reviewer, CTSI NIH Clinical and Translational Science (2012)

9. Ad-hoc Journal Reviewer:

- a. Progress in Neuropsychopharmacology (1998)
- b. Biological Psychiatry (1998 – 2000, 2008)
- c. Journal of Gerontology (1999)
- d. Journal of Autism and Developmental Disorders (2000)
- e. NeuroImage (2000)
- f. Journal of Neuroscience (2001)
- g. Psychophysiology (2001)
- h. Journal of Neurophysiology (2002)
- i. Cerebral Cortex (2002-2005)
- j. Archives of General Psychiatry (2003)
- k. Journal of Experimental Child Psychology (2003)
- l. Developmental Science (2003)
- m. Human Brain Mapping (2003)
- n. Neuropsychology (2004)
- o. Journal of Child Psychology and Psychiatry (2004)
- p. International Journal of Neuropsychopharmacology (2004)
- q. Developmental Psychology (2004)
- r. Trends in Cognitive Sciences (2004)
- s. Developmental Brain Disorders (2004)
- t. Brain (2004)
- u. Cognition and Perception (2005)
- v. Neuropsychologia (2005)
- w. Journal of Cognitive Neuroscience (2005)
- x. Cognitive Brain Research (2005)
- y. Current Directions for Psychological Science (2005)
- z. Experimental Brain Research (2005)
- aa. Neuroscience Letters (2006)
- bb. Child Development (2006)
- cc. Frontiers in Human Neuroscience (2007)
- dd. Nature Reviews Neuroscience (2007)
- ee. Psychological Science (2008)
- ff. Consulting Board of the Psychology Bulletin (2008)
- gg. Proceedings of the National Academy of Sciences of the United States of America (2008)
- hh. Development and Psychopathology (2010)
- ii. American Journal of Psychiatry (2010)
- jj. Frontiers in Human Neuroscience (2010)
- kk. Neuron (2010)
- ll. SRCD Child Development Perspectives (2011)

10. Ad-Hoc Grant Reviewer

- a. National Institutes of Health:
 - i. Ad Hoc Reviewer: Scientific Review Branch/NINDS – “Randomized Indomethacin GMH/IVH Prevention Trial” (1999, June)
 - ii. 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)
 - iii. Ad Hoc Reviewer: The Developmental Brain Disorders [DBD] Study Section NIH (2004, November)

- iv. Ad Hoc Reviewer: Cognition and Perception [CP] Study Section NIH (2005, February, November)
- v. Participant - NIMH Council Work on MRI Research Practices Meeting in Bethesda, Maryland (2005, September)
- b. National Science Foundation (2002, July)
- c. National Institute on Drug Abuse (2002, July)

Other:

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

MEDIA:

- a. Television Nacional De Chile Enlaces - Adolescencia: La tormenta del crecimiento Brain maturation and changes in behavior (2002)
- b. Radiology (2002)
- c. Evans, J (2003, December) Brain studies spotlight origins of self-control *Pediatric News*, 37, 22
- d. Beckman, M (2004, July 30) Crime culpability and the adolescent brain *Science*, 305, 596-599
- e. Raeburn, P (2004, October 17) Too immature for the death penalty? *The New York Times Magazine*, Section 6, Page 26, Column 1
- f. 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
- g. Brain's 'working memory' expands with age (2004, November 1) *The Pittsburgh Post Gazette* A12
- h. 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*
- i. 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
- j. Glaser, G (2005, February 21) Teens' brains not fully wired for a reason *The Oregonian*
- k. Collins, M (Host), Luna, B (Guest Speaker) (2005, August 11) [Radio Program Broadcast] In *Charlotte Talks with Mike Collins* North Carolina WFAE 907FM
- l. Wald, C (Producer), Luna, B (Guest Speaker) (2005, December 1) [Radio Program Broadcast] In *Science Update Radio Program* Washington, DC
- m. Sabbagh, L (2006, August/September) The teen brain, hard at work No really *Scientific American Mind*, 20-25
- n. Powell, K (2006, August 24) How does the teenage brain work? *Nature News Feature*, 442, 865-867
- o. Templeton, D (2006, November 29) Teenagers' brains are still under construction *Pittsburgh Post-Gazette*
- p. Lustig, R (Producer), Luna, B (Guest Speaker) (2006, December 7) [Radio Program Broadcast] In *Generation Next Daily Documentary*, BBC's World News
- q. Miksch, J (2006) FBI Calling *PITTMED* University of Pittsburgh School of Medicine Magazine 8(4), 3

- r. 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*
- s. *Oxygen Mentors: Bringing Along the Next Generation* [a public affairs campaign which provides mentoring to women nationwide] (2007)
- t. Bernardini, B (5 July 2007) SuperQuark Science TV program RAI 1, European Cable *Scientific Advances*
- u. Vitone, E (Fall 2007) "What Possessed You?" *PITTMED University of Pittsburgh School of Medicine Magazine*
- v. National Press Club Juvenile Sentence of Life without Parole November 2009, Washington DC
- w. Vitone, E (Fall 2010) "Mars and Venus Revisited" *PITTMED University of Pittsburgh School of Medicine Magazine*
- x. Slomski, A (Fall 2010) Crazy Kids *Proto: Dispatches from the Frontiers of Medicine*, 27-33
- y. Luna B (Jan 21, 2011) Understanding Voluntary Behavior *New York Times, Opinion Pages*
- z. Baum, M (23 May 2011) Action Potential: Probing the Brain Power of Pitt Neuroscience, 4-5 Pitt Chronicle
- aa. Dobbs, D (Oct 2011) Beautiful Brains. National Geographic Magazine, 36-59
- bb. Taylor, Sarah. (Producer), Luna, B. (Guest Speaker). (2011, October 5) [Radio Program Broadcast]. In *The Regina Brett show*, WKSU 89.7.
- cc. Shiely, Kyle. (Producer), Luna, B. (Guest Speaker). (2011, October 9) [Radio Program Broadcast]. In *News and Views*, WCCO 830.
- dd. Smith, Jonathan. (producer), Luna, B. (Guest Speaker). (2011, October 12) [Radio Program Broadcast]. In *Word of Mouth*, NHPR.
- ee. Townsend, Melissa. (producer) Luna, B. (Guest Speaker). (2011, October 12) [Radio Program Broadcast]. In *Midmorning*, Minnesota Public Radio.
- ff. Landau, Elizabeth. (Oct 2011) Why Teens are Wired for Risk. CNN.com.
- gg. Sherman, Carl. (Oct. 2012) A Delicate Balance: Risks, Rewards, and the Adolescent Brain. *The Dana Foundation*.
- hh. Chedd, Graham. PBS Special (Sept. 2013) Brains on Trial with Alan Alda.

LIST of CURRENT RESEARCH INTERESTS:

- a. 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
- b. Neural bases of impairments in the development of cognition and object processing in typical participants and those diagnosed with autism
- c. 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
- d. Effects of reward and motivation on cognitive control of behavior through adolescence
- e. Effects of cannabis on prefrontal systems supporting working memory
- f. Neurobiology of psychiatric illness in epilepsy
- g. Cognitive control and Attention Deficit and Hyperactivity Disorder (ADHD)
- h. Cognitive control and substance abuse in adolescence

SERVICE:

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

- a. Co-Director, Neurobehavioral Studies Program (1998 - 2002)
- b. Reviewer for WPIC Research Committee (1998 - Present)
- c. Neuroscience, Clinical, and Translational Research Center Scientific Advisory Committee (1999 - Present)
- d. Director of the Laboratory of Neurocognitive Development (2000- Present)
- e. Pilot Imaging Project (PIP) Review Committee (2003- Present)
- f. MR Advisory Committee (2003- Present)
- g. Academic Promotions Committee (2009-present)
- h. Development of Cortico-limbic Circuitry Recruitment Group (2010-present)
- i. Faculty Search Committee (2010-present)
- j. WPIC Research Day Planning Committee (2011-present)
- k. K-Award Mentor Committee (2011-present)

Community Activities:

- a. Lectureship – *Neurobiological Basis of Psychopathology*, Mercy Behavioral Health Outpatient Staff, Pittsburgh, PA (1999)
- b. Lectureship – *The Human Brain*, Liberty Elementary School, Pittsburgh, PA (2000)
- c. Guest Speaker – *Fight for Lifers West (FFLW) Adolescents with life sentences Meeting*, Thomas Melton Center, Pittsburgh PA (2006, December 16)
- d. Member, Board of Directors – Planned Parenthood of Western Pennsylvania (2007-Present)
- e. Provided Expert Testimony – Senate Judiciary Public Hearing on Juvenile Lifers, Senator Greenleaf, Harrisburg, PA (2008, September 22)
- f. Guest Speaker, Judicial educational seminar on Emerging Issues in Neuroscience (May 2009)
- g. 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)
- h. Provided assistance in APA and AMA briefs regarding the juvenile sentence of Life Without Parole presented to the Supreme Court (November 2009)
- i. Guest Speaker - Pittsburgh Community Cinema at WQED screening of *Me Facing Life: Cyntoia's Story* Pittsburgh, PA (2011, Feb 10)
- j. 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)
- k. 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)
- l. Guest Speaker – *What can brain studies tell us about adolescent behavior?* Pittsburgh Allderdice High School, Pittsburgh, PA (2012, March 8)
- m. Scholarly Discussion Panelist – Lantern Theater Company, Philadelphia, PA (2012, March 12)