Leah H. Somerville

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Academic Appointments

2016-Present	Associate Professor of Psychology Core Faculty, Center for Brain Science Harvard University
2012-2016	Assistant Professor of Psychology Core Faculty, Center for Brain Science Harvard University

Education & Training

2008-2012	Postdoctoral Fellow, Developmental Cognitive Neuroscience Sackler Institute for Developmental Psychobiology Weill Cornell Medical College
2003-2008	Ph.D., Psychology Dartmouth College
1997-2001	Bachelor of Science *summa cum laude,* Psychology University of Wisconsin-Madison

Honors & Awards

2017	Young Investigator Award *Cognitive Neuroscience Society*
2016	Everett Mendelsohn Excellence in Mentoring Award *Harvard University Graduate School of Arts & Sciences*
2014	F.J. McGuigan Early Career Investigator Research Prize on Understanding the Human Mind *American Psychological Association*
2014	Janet Taylor Spence Award for Transformative Early Career Contributions *Association for Psychological Science*
2013	Certificate of Distinction, Star Family Prizes for Excellence in Advising *Harvard College*

2013	Rising Star Award *Association for Psychological Science*
2011	Samuel W. Perry, III MD Distinguished Award in Psychiatric Medicine *Weill Cornell Medical College*
2010	Conference Travel Award *Organization for Human Brain Mapping*
2010	Career Development Award *Anxiety Disorders Association of America*
2008	Summer Institute in Cognitive Neuroscience Fellowship (Lake Tahoe, CA)
2008	Hannah Croasdale Graduate Scholar Award (college-wide dissertation award) *Dartmouth College*
2007	Summer Institute in Cognitive Neuroscience Fellowship (Santa Barbara, CA)
2001	*Phi Beta Kappa*

Publications (downloadable at http://andl.wjh.harvard.edu)

°indicates trainee co-author

Under review

1. Insel C.°, Kastman E.K.°, Glenn C.R.°, & Somerville L.H. (revision under review), Development of corticostriatal connectivity constrains goal directed behavior through adolescence.

2. Nook E.C.°, Sasse S.F.°, Lambert H.K., McLaughlin K.M., & Somerville L.H. (revision under review). Increasing verbal knowledge mediates development of multidimensional emotion representation.

3. Lee N.C., Weeda W.D., Insel C.°, Somerville L.H., Krabbendram L., & Huizinga M. (under revision). Neural substrates of the influence of emotional cues on cognitive control in risk-taking adolescents.

4. Powers K.E.°, Yaffe G., Hartley, C.A., Davidow, J.Y.°, Kober H., & Somerville L.H. (under revision). When your friend can win or lose: Consequences for peers differentially bias computations about risk from adolescence to adulthood.

5. Insel C.°*, Glenn C.°*, Nock M., & Somerville L.H. (under review). Striatum function in adolescent depression: Intact reward-reactivity but blunted reward-scaling. *Equal contribution

6. Rodman A.M.°, Powers K.E.°, & Somerville L.H. (under review). The development of self-protective biases in the face of social evaluative feedback.

In press

7. Ahmed S.P.°, Somerville L.H.*, & Sebastian C.L.* Using mental time travel to regulate emotion in adolescence: modulation by reactive aggression. *Cognition and Emotion.* *Equal contribution

8. Somerville L.H. & McLaughlin K.A. (in press). What develops during emotional development? Normative trajectories and sources of psychopathology risk in adolescence. In R.J. Davidson, A. Fox, & R. Lapate, & A.J. Shackman, *The Nature of Emotion,* 2nd Edition. Oxford: Oxford University Press.

2017

9. Nook E.K.°, Schleider J.S., & Somerville L.H. (2017). A linguistic signature of spontaneous distancing in emotion regulation. *Journal of Experimental Psychology: General, 146(3),* 337-346.

10. Shermohammed M.S.°, Mehta P., Zhang J.°, Brandes C., Chang L.J., & Somerville L.H. (2017). Does psychosocial stress impact cognitive reappraisal? Behavioral and neural evidence. *Journal of Cognitive Neuroscience.*

11. Somerville L.H., Sasse S.F.°, Garrad M.C.°, Drysdale A.T., Abi Akar N.°, Insel C.°, & Wilson R.C. (2017). Charting the expansion of strategic exploratory behavior during adolescence. *Journal of Experimental Psychology: General, 146(2),* 155-164.

2016

12. Casey B.J., Galván, A., & Somerville L.H. (2016). Beyond simple models of adolescence to an integrated circuit-based account. *Developmental Cognitive Neuroscience, 17,* 128-130.

13. Defoe I.N.°, Dubas J., Somerville L.H., Lugtig P., & van Aken M.A.G. (2016). The unique roles of intrapersonal and social factors in adolescent smoking development. *Developmental Psychology, 52(12),* 2044-2056.

14. Fan Q., Witzel T., Nummenmaa A., Van Dijk K.R.A., Van Horn J.D., Drews M.K., Somerville L.H., Sheridan M.A., Santillana R., Snyder J., Hedden T., Shaw E.E., Renvall V., Zanzonico R., Keil B., Cauley S., Polimeni J.R., Tisdall D., Buckner R.L., Wedeen V.J., Wald L.L., Toga A.W., & Rosen B.R. (2016). MGH-USC Human Connectome Project datasets with ultra-high *b*-value diffusion MRI. *Neuroimage, 124(1),* 1108-1114.

15. Powers K.E.°, Somerville L.H., Kelley, W.M., & Heatherton T.F. (2016). Striatal associative learning signals are tuned to in-groups. *Journal of Cognitive Neuroscience, 28(9),* 1243-1254.

16. Rasmussen J., Casey B.J., van Erp T.G.N., Tamm L., Epstein J.N., Buss C., Bjork J.M., Molina B.S.G., Velanova K., Mathalon D.H., Somerville L.H., Swanson J.M., Wigal T., Arnold L.E., & Potkin S. (2016). ADHD and cannabis use in young adults examined using fMRI of a Go/NoGo task. *Brain Imaging and Behavior, 10,* 761-771.

17. Somerville L.H. (2016). Searching for signatures of brain maturity: What are we searching for? *Neuron, 92(6),* 1164-1167.

18. Somerville L.H. (2016). Systems neuroscience: The balancing act of behavioral regulation. Dispatch for Meyer & Bucci, *Current Biology, 26(20),* R925-R926.

19. Somerville L.H. (2016). Emotional development in adolescence. In L. F. Barrett, M. Lewis, & J. M. Haviland-Jones, *Handbook of Emotion,* 4th Edition. New York: Guilford Press.

20. van den Bulk B.G.°, Somerville L.H., van Hoof M.-J., van Lang N.D.J., van der Wee, N.J.A., Crone E.A., & Vermeiren R.R.J.M. (2016). Amygdala habituation to emotional faces in adolescents with internalizing disorders, adolescents with childhood sexual abuse related PTSD, and healthy adolescents. *Developmental Cognitive Neuroscience, 21,* 15-25.

2015

21. Hartley C.A. & Somerville L.H. (2015). The neuroscience of adolescent decision-making. *Current Opinion in Behavioral Sciences, 5,* 108-115.

22. McLaughlin K.A., Garrad M.C.°, & Somerville L.H. (2015). What develops during emotional development? A component process approach to identifying sources of psychopathology risk in adolescence. *Dialogues in Clinical Neuroscience, 17,* 403-410.

23. van Duijvenvoorde A.C.K., Huizenga H.M., Somerville L.H., Delgado M.R., Powers A., Weeda W. D., Casey B.J., Weber E.U., & Figner B. (2015). Neural correlates of expected risks and returns in risky choice across development. *Journal of Neuroscience, 35(4),* 1549-1560.

2014

24. Braver T.S., Krug M.K., Chiew K.S., Kool W., Westbrook J.A., Clement N.J., Adcock R.A., Barch D.M., Botvinick M.M., Carver C.S., Cools R., Custers R., Dickinson A., Dweck C.S., Fishbach A., Gollwitzer P.M., Hess T.M., Isaacowitz D.M., Mather M., Murayama K., Pessoa L., Samanez-Larkin G.R., & Somerville L.H. (2014). Mechanisms of motivation-cognition interaction: Challenges and opportunities. *Cognitive, Affective, and Behavioral Neuroscience, 14,* 443-472.

25. Dreyfuss M., Caudle K., Drysdale A.T., Johnston N.E., Cohen A.O., Somerville L.H., Galván A., Tottenham N., Hare T.A., & Casey B.J. (2014). Teens impulsively react rather than retreat from threat. *Developmental Neuroscience, 36(3-4),* 220-227.

26. Drysdale A.T., Hartley C.A., Pattwell S.S., Ruberry E.J., Somerville L.H., Compton S.N., Lee F.S., Casey B.J., & Walkup J.T. (2014). Fear and anxiety from principle to practice: Implications for when to treat youth with anxiety disorders. *Biological Psychiatry, 75(11),* e19-20.

27. Jones R.M., Somerville L.H., Li J., Ruberry E.J., Powers A., Mehta N.°, Dyke J., & Casey B.J. (2014). Adolescent-specific patterns of behavior and neural activity during social reinforcement learning. *Cognitive, Affective, & Behavioral Neuroscience, 14,* 683-697.

28. Somerville L.H., van den Bulk B.G.°, & Skwara A.C.° (2014). Response to: The triadic model perspective for the study of adolescent motivated behavior. *Brain and Cognition, 89*, 112-113.

29. Somerville L.H. & Casey B.J. (2014). Emotional reactivity and regulation across development. In M. Gazzaniga & R. Mangun (Eds.), *The Cognitive Neurosciences V.* Cambridge, MA: MIT Press.

30. Teslovich T., Mulder M., Franklin N. T., Ruberry E.J., Millner A., Somerville L.H., Simen P., Durston S., & Casey, B.J. (2014). Adolescents let sufficient evidence accumulate before making a decision when large incentives are at stake. *Developmental Science, 17(1),* 59-70.

2013

31. Powers K.E.°, Somerville L.H., Kelley W.M., & Heatherton T.F. (2013). Rejection sensitivity polarizes striatal-medial prefrontal activity when anticipating social feedback. *Journal of Cognitive Neuroscience, 25(11),* 1887-1995.

32. Somerville L.H. (2013). The teenage brain: Sensitivity to social evaluation. *Current Directions in Psychological Science, 22(2),* 129-135.

33. Somerville L.H., Wagner D.D., Wig G.S., Moran J.M., Whalen P.J., & Kelley W.M. (2013). Interactions between transient and sustained neural signals support the generation and regulation of anxious emotion. *Cerebral Cortex, 23(1)*, 49-60.

34. Somerville L.H., Jones R.M., Ruberry E.J., Dyke J.P., Glover, G., & Casey B.J. (2013). Medial prefrontal cortex and the emergence of self-conscious emotion in adolescence. *Psychological Science, 24(8),* 1554-1562.

2011

35. Casey B.J., Jones R.M., & Somerville L.H. (2011). Braking and accelerating of the adolescent brain. *Journal of Research on Adolescence: A Decade in Review,* 21(1), 21-33.

36. Casey B.J., Somerville L.H., Gotlib I.H., Ayduk O., Franklin N.T., Askren M.K., Jonides J., Berman M.G., Wilson N.L., Teslovich T., Glover G., Zayas V., Mischel W., & Shoda Y. (2011). Behavioral and neural correlates of delay of gratification 40 years later. *Proceedings of the National Academy of Sciences, USA, 108(36)*, 14988-15003.

37. Davis F.C., Somerville L.H., Ruberry E.J., Berry A., Shin L.M., & Whalen P.J. (2011). A tale of two negatives: Differential memory modulation by threat-related facial expressions. *Emotion, 11(3),* 647-655.

38. Jones R.M., Somerville L.H., Li J., Ruberry E.J., Libby V., Glover G., Voss H.U., Ballon D.J., & Casey B.J. (2011). Behavioral and neural properties of social reinforcement learning. *Journal of Neuroscience, 31(37),* 13039-13045.

39. Somerville L.H. & Casey B.J. (2011). Response to Moshman, "Adolescents and their teenage brains." *Human Development, 54(4),* 1-17.

40. Somerville L.H., Fani N., & McClure-Tone E.B. (2011). Behavioral and neural representation of emotional facial expressions across the lifespan. *Developmental Neuropsychology, 36(4),* 1-22.

41. Somerville L.H.*, Hare T.A.*, & Casey B.J. (2011). Frontostriatal maturation predicts behavioral regulation failures to appetitive cues in adolescence. *Journal of Cognitive Neuroscience, 23(9),* 2123-2134. *Equal contribution

2010

42. Casey B.J., Jones R.M., Levita L., Libby V., Pattwell S., Ruberry E.J., Soliman F.A., & Somerville L.H. (2010). The storm and stress of adolescence: Insights from human imaging and mouse genetics. *Developmental Psychobiology, 52(3),* 225-235.

43. Soliman F., Glatt C.E., Levita L., Bath K.G., Jones R.M., Pattwell S.S., Tottenham N., Somerville L.H., Voss H.U., Glover G., Ballon D.J., Lee F.S., & Casey B.J. (2010). A genetic variant BDNF (Val66Met) polymorphism alters extinction learning in both mouse and human. *Science, 327,* 863-866.

44. Somerville L.H. & Casey B.J. (2010). Developmental neurobiology of cognitive control and motivational systems. *Current Opinion in Neurobiology, 20(2),* 1-6.

45. Somerville L.H., Jones R.M., & Casey B.J. (2010). A time of change: Behavioral and neural correlates of adolescent sensitivity to appetitive and aversive environmental cues. *Brain & Cognition, 72(1),* 124-133.

46. Somerville L.H., Kelley W.M., & Heatherton T.F. (2010). Self-esteem modulates medial prefrontal cortical responses to evaluative social feedback. *Cerebral Cortex, 20(12*), 3005-3013.

47. Somerville L.H., Whalen P.J., & Kelley W.M. (2010). Human bed nucleus of the stria terminalis indexes hypervigilant threat monitoring. *Biological Psychiatry, 68(5),* 416-424.

2009 & prior

48. Aminoff E.M., Balslev D., Borroni P., Bryan R.E., Chua E.A., Cloutier J., Cross E.S., Drew T., Funk C.M., Gil-da-Costa R., Guerin S.A., Hall J.L., Jordan K.E., Landau A.N., Molnar-Szakacs I., Montaser-Kouhsari L., Olofsson J.K., Quadflieg S., Somerville L.H., Sy J.L., Uddin L.Q., & Yamada M. (2009). The landscape of cognitive neuroscience: Challenges, rewards, and new perspectives. In M. Gazzaniga (Ed.), *The New Cognitive Neurosciences,* 4th Edition. Cambridge, MA: MIT Press.

49. Whalen P.J., Johnstone T., Somerville L.H., Nitschke J.B., Polis S.A., Alexander A.L., Davidson R.J., & Kalin N.H. (2008). A functional magnetic resonance imaging predictor of treatment response to venlafaxine in generalized anxiety disorder. *Biological Psychiatry, 63(9),* 858-863.

50. Somerville L.H., Heatherton T.F., & Kelley W.M. (2006). Anterior cingulate cortex responds differentially to expectancy violation and social rejection. *Nature Neuroscience, 9(8),* 1007-1008.

51. Somerville L.H. & Whalen P.J. (2006). Prior experience as a stimulus category confound: An example using facial expressions of emotion. *Social, Cognitive, and Affective Neuroscience, 1,* 271-274.

52. Somerville L.H., Wig G.S., Whalen P.J., & Kelley W.M. (2006). Dissociable medial temporal lobe contributions to social memory. *Journal of Cognitive Neuroscience, 18(8),* 1253-1265.

53. Johnstone T., Somerville L.H., Alexander A.L., Davidson R.J., Kalin N.H., & Whalen P.J. (2005). Stability of amygdala BOLD response to fearful faces over multiple scan sessions. *Neuroimage, 25(4),* 1112-1123.

54. Kim H., Somerville L.H., Johnstone T., Polis S., Alexander A.L., Shin L.M., & Whalen P.J. (2004). Contextual modulation of fMRI responsivity to surprised faces. *Journal of Cognitive Neuroscience, 16(10),* 1730-1745.

55. Somerville L.H., Kim H., Johnstone T., Alexander A.L., & Whalen P.J. (2004). Human amygdala responses during presentation of happy and neutral faces: Correlations with state anxiety. *Biological Psychiatry, 55(9),* 897-903.

56. Whalen P.J., Kagan J., Cook R.G., Davis F.C., Kim H., Polis S., McLaren D.L., Somerville L.H., McLean A.A., Maxwell J.S., & Johnstone T. (2004). Human amygdala responsivity to masked fearful eye-whites. *Science, 306(5704),* 2061.

57. Kim H., Somerville L.H., Johnstone T., Alexander A.L., & Whalen P.J. (2003). Inverse amygdala and medial prefrontal cortex responses to surprised faces. *Neuroreport, 14(18),* 2317-2322.

58. Kim H., Somerville L.H., McLean A.A., Johnstone T., Shin L.M., & Whalen P.J. (2003). Functional MRI responses of the human dorsal amygdala/substantia innominata region to facial expressions of emotion. *Annals of the New York Academy of Sciences, 985,* 533-535.

59. Whalen P.J., Shin L.M., Somerville L.H., McLean A.A., & Kim H. (2002). Functional neuroimaging studies of the amygdala in depression. *Seminars in Clinical Neuropsychiatry, 7(4),* 234-242.

Research Grants

2016-2021 National Institutes of Health U01
Mapping the human connectome during typical development
Mapping the human connectome during typical development longitudinal supplement
Role: Co-Principal Investigator (with David van Essen, Deanna Barch, Susan Bookheimer, Randy Buckner, Mirella Dapretto, Stephen Smith, Kathleen Thomas, Essa Yacoub)
Total amount awarded: $16,500,000
To PI Somerville: $3,560,000

2016-2019 Harvard Dean's Competitive Fund for Promising Scholarship Seed Grant
The neurodevelopment of flexible decision making in adolescents
Role: Co-Principal Investigator (with postdoctoral fellow Juliet Davidow)
Amount awarded: $32,090

2016-2018 Brain & Behavior Research Foundation NARSAD Young Investigator Award
Prospective identification of brain connectivity patterns distinguishing psychopathology risk trajectories during adolescence
Role: Principal Investigator
Amount awarded: $69,480

2015-2020 National Science Foundation
CAREER Award
Psychological and neurodevelopmental mechanisms of social influence on adolescent decision-making
Role: Principal Investigator
Amount awarded: $750,000

2015-2016 Harvard Catalyst
"Addressing Mental Health in the Second Decade of Life Through Translational Lifecourse Research" Pilot Grant
Quantifying reinforcement learning deficits in adolescent depression: A computational imaging study
Role: Co-Principal Investigator (with graduate student Catherine Insel)
Amount awarded: $72,549

2015-2016 Harvard Initiative for Learning & Teaching
Spark Grant
LINK: Preparing students to evaluate evidence

Role: Co-Principal Investigator (with Todd Rose, Stephanie Sasse)
Amount awarded: $16,500

2014-2017 Yale University Law School
Oscar M. Rubenhausen Fund
Social consequences of decisions: A developmental study
Role: Co-Investigator (PIs: Hedy Kober, Gideon Yaffe)
Total amount awarded: $250,000
To Co-I Somerville: $102,910

2014-2017 US Army Natick Soldier Research Development & Engineering Center
Research Project Contract
Examining individual differences in the cognitive processes and brain networks supporting social cognition in emerging adults
Role: Principal Investigator
Amount awarded: $659,267

2014-2015 Harvard University Mind/Brain/Behavior Interfaculty Initiative
Research Grant
Real-life risk taking, regulation in the face of reward, and neurodevelopment during adolescence
Role: Co-Principal Investigator (with Margaret Sheridan)
Amount awarded: $50,000

2010-2015 National Institute of Mental Health K99R00 Pathway to Independence Award
K99 Mentored Phase (2010-2012)
R00 Independent Phase (2012-2015)
Development of tonic and phasic neural systems mediating affect and anxiety
Role: Principal Investigator
Amount awarded: $912,289

2004-2007 National Science Foundation
Graduate Research Fellowship

Grants & Fellowships Awarded to Trainees

2016-2018 Harvard Mind/Brain/Behavior Interfaculty Initiative Research Grant
Early life stress and disruption of frontal circuits for executive function and emotional reactivity
Awarded to collaborating postdoctoral fellow Carolyn Johnson
Role: Co-Mentor (with Takao Hensch)

2016-2018 Netherlands Organisation for Scientific Research (NWO) Rubicon Postdoctoral Fellowship
Risky friends: How peers influence risk-taking behavior in adolescence
Awarded to postdoctoral fellow Barbara Braams
Role: Mentor

2016-2017 Eric M. Mindich Research Grant, Harvard University Foundations of Human Behavior Initiative
Adolescent attunement to peer evaluation: Neurodevelopmental mechanisms and consequences of social learning

Awarded to postdoctoral fellow Katherine Powers
Role: Mentor

2016-2017 Harvard University Sackler Scholarship in Psychobiology
Identifying neurodevelopmental markers of risk for depression during adolescence
Awarded to graduate student Catherine Insel
Role: Mentor

2016-2017 American Psychological Association Elizabeth Munsterberg Koppitz Child Psychology Graduate Fellowship
A computational modeling approach to understanding social hierarchy dynamics in adolescence
Awarded to graduate student Alexandra Rodman
Role: Mentor

2014-2016 American Foundation for Suicide Prevention Pilot Grant
Examining the neurobiology of suicidal behavior in adolescents
Role: Co-Mentor (PI: Catherine Glenn, Co-Mentor: Matthew Nock)

Ongoing National Science Foundation Graduate Research Fellowship
Awarded to graduate students:

2014-2017	Catherine Insel
2015-2018	Erik Nook
2016-2019	Maheen Shermohammed

Invited & Conference Talks (2013-Present)

2018

Invited Symposium – *Society for Research on Adolescence* (Minneapolis, MN)
Social Lunch – *Harvard University* (Cambridge, MA)

2017

Symposium Chair & Invited Speaker – *American College of Neuropsychopharmacology* (Palm Springs, CA)
Motivation Center Seminar – *University of Pittsburgh School of Education* (Pittsburgh, PA)
Psychology & Biology Joint Department Colloquium – *Salem State University* (Salem, MA)
Session Chair & Invited Speaker – *Flux: The International Congress for Integrative Developmental Cognitive Neuroscience* (Portland, Oregon)
Invited Summer School Faculty – *Tokohu University* (Sendai, Japan)
Invited Symposium (x2) – *Japan Neuroscience Society* (Tokyo, Japan)
Invited Participant – *Office of the Director Workshop on Computational Psychiatry, National Institute of Mental Health* (Bethesda, MD)
Invited Speaker – *Multidisciplinary Conference on Reinforcement Learning & Decision Making* (Ann Arbor, MI)
Symposium – *Association for Psychological Science* (Boston, MA)
Keynote – *Adolescent Neuroscience Group Symposium, UCLA* (Los Angeles, CA)
Symposium – *Society for Research on Child Development* (Austin, TX)
Young Investigator Award Address – *Cognitive Neuroscience Society* (San Francisco, CA)
Center for Addiction Medicine Grand Rounds – *Massachusetts General Hospital* (Boston, MA)
Symposium – *Society for Personality and Social Psychology* (San Antonio, TX)
Translational Neuroscience Seminar – Mount Sinai Medical School (New York, NY)

2016

Social Area Research Seminar – *Princeton University* (Princeton, NJ)
Cognitive Neuroscience Colloquium – *Duke University* (Durham, NC)
Psychology Department Colloquium – *Columbia University* (New York, NY)
Psychology Department Colloquium – *Temple University* (Philadelphia, PA)
Psychology Department Colloquium – *Concordia University* (Montreal, Canada)
Affective Neuroscience Study Group (ANGST) Seminar – *National Institutes of Health* (Bethesda, MD)
Invited Speaker – *Child and Brain Development Meeting, Canadian Institute for Advanced Studies* (Boston, MA)
Psychology Department Colloquium – *Korea University* (Seoul, South Korea)
Center for Brain Sciences Annual Retreat – Harvard University (Cambridge, MA)
Research Seminar for Psychiatry Residents – *McLean Hospital/Harvard Medical School* (Belmont, MA)
Invited Speaker – *Social & Affective Neuroscience Society* Conference (New York, NY)
Invited Speaker – *Center for the Developing Child Seminar, Harvard University* (Cambridge, MA)
Social Brain Sciences Seminar – *Dartmouth College* (Hanover, NH)

2015

Speaker & Conference Faculty – *The Science of Character: Using Brain Science to Promote Student Self Regulation, Resilience and Respect* (Boston, MA)
Panelist – *Promises and Perils of Adolescent Neuroscience and Law, Harvard University Law School* (Cambridge, MA)
Keynote Address – *National Conference of Chief Justices & Conference of State Court Administrators* (Omaha, NE)
Institute Colloquium – *Max Planck Institute for Human Cognitive & Brain Sciences* (Leipzig, Germany)
Invited Speaker – *Special Seminar on Social Brain Development, Leiden University,* (Leiden, Netherlands)
Invited Speaker – *Behavioral Sciences Institute Seminar, University of Nijmegen,* (Nijmegen, Netherlands)
Departmental Colloquium – *Donders Institute of Cognitive Neuroscience* (Nijmegen, Netherlands)
Symposium – *Association for Psychological Science Conference* (New York, NY)
Symposium – *British Neuroscience Association Conference* (Edinburgh, UK)
Center for Law, Brain, and Behavior Juvenile Justice Symposium – *Harvard Medical School* (Boston, MA)
Conte Colloquium on Mental Health – *Harvard University* (Cambridge, MA)
Judge Baker Children's Center Child Mental Health Forum – *Harvard Medical School* (Boston, MA)

2014

Sackler Symposium – *International Society for Developmental Psychobiology* (Washington, DC)
Developmental Psychology Seminar – *Yale University* (New Haven, CT)
Invited Speaker – *The Social Brain Conference (sponsored by FENS/The Brain Prize)* (Copenhagen, Denmark)
Plenary Address – *National Center for State Courts Juvenile Justice Reform Summit* (Northampton, MA)
Course Faculty – *Mortimer D. Sackler Summer Institute in Developmental Psychobiology* (New York, NY)
Invited Speaker – *Capturing Brain Changes across the Lifespan: Implications for Affective Control and Wellbeing* Conference (Reading, UK)
Seminar – *Institute of Cognitive Neuroscience, University College London* (London, UK)
BrainMap Research Seminar – *Martinos Center for Biomedical Imaging* (Charlestown, MA)
Symposium – *Society for Biological Psychiatry* Conference (New York, NY)
Flash Talk – *Society for Affective Science* Conference (Bethesda, MD)
Symposium (2) and Discussant – *Society for Research on Adolescence* Conference (Austin, TX)
Symposium – *Eastern Psychological Association Conference* (Boston, MA)

Neuroscience of Social Decision Making Seminar – *Princeton University* (Princeton, NJ)
Center for Addiction Medicine Grand Rounds – *Massachusetts General Hospital* (Boston, MA)
Invited Speaker – *Social Brain Sciences Symposium* (Boston, MA)
Social Psychology Seminar – Northeastern University (Boston, MA)

2013

Neuroimaging & Neuroscience Seminar – *Boston VA Hospital* (Boston, MA)
Social Psychology Seminar – *Brown University* (Providence, RI)
Current Work in Clinical Psychology Seminar – *Yale University* (New Haven, CT)
Behavioral Laboratory in the Social Sciences (BLISS) Brownbag – *Harvard University* (Cambridge, MA)
Keynote Address – *University of Amsterdam* (Amsterdam, Netherlands)
MGH Psychiatric Genetics & Translational Research Seminar – *Harvard Medical School* (Boston, MA)
Symposium Chair and Speaker – *Association for Psychological Science Conference* (Washington, DC)
Center for Brain Sciences Brownbag – *Harvard University* (Cambridge, MA)
Speaker – *Mechanisms of Motivation, Cognition, & Aging Interactions Conference* (Washington, DC)
Uchida Lab Meeting Department of Molecular & Cellular Biology – *Harvard University* (Cambridge, MA)
Mind, Brain, and Behavior Seminar – *Harvard University* (Cambridge, MA)
Laboratories of Cognitive Neuroscience Brownbag – *Children's Hospital Boston* (Boston, MA)
Women in Science Minisymposium – *Harvard University* (Cambridge, MA)
Psychology Department Colloquium – *University of Wisconsin-Milwaukee* (Milwaukee, WI)
Neuroimaging Seminar – *McLean Hospital* (Boston, MA)

Society Memberships

Association for Psychological Science, *Cognitive Neuroscience Society, Flux: The International Congress for Integrative Developmental Cognitive Neuroscience*, *Social & Affective Neuroscience Society, Society for Affective Science, Society for Neuroscience, Society for Research on Adolescence*

Service to the Field

Societies

2017	Program Committee *Flux: The International Congress for Integrative Developmental Cognitive Neuroscience*
2016-2019	Treasurer (2017-2019) Member-at-Large, Executive Committee (2016-2017) *Society for Affective Science*
2014-2017	Co-Chair, Emotion Preconference *Society for Personality & Social Psychology*
2014	Course Faculty Mortimer D. Sackler Summer Institute in Developmental Psychobiology
2012-2015	Co-Chair of Annual Meeting (2015) Member-at-Large, Executive Committee (2012-2015) *Social & Affective Neuroscience Society*
2012	Co-Chair Social Brain Sciences Symposium (New England area meeting)

2009	Co-Director John Merck Fund Summer Institute on the Biology of Developmental Disabilities

Reviewing

2017-2020	F.J. McGuigan Dissertation Award Selection Committee *American Psychological Association*
2016-2019	Janet Taylor Spence Award Selection Committee *Association for Psychological Science*
2016	F.J. McGuigan Early Career Investigator Prize Selection Committee *American Psychological Association*
2014-Present	Consulting Editor *Motivation Science*
Continual	Peer review (*Journals, Grants [e.g., NIH, NSF, NWO], Fellowships, Book Proposals*)

Teaching & Mentoring

Course Head

Every semester	PSY2160r *Laboratory in Affective Neuroscience & Development*
Fall 2017	PSY1702 *The Emotional Mind*
Spring 2016	PSY1702 *The Emotional Mind*
Fall 2015	PSY1355 *The Adolescent Brain*
Spring 2014	PSY1355 *The Adolescent Brain*
Fall 2013	PSY1702 *The Emotional Mind*
Spring 2013	PSY1702 *The Emotional Mind*

Co-Instruction

Every year	PSY2020 *Cognition, Brain, & Behavior Graduate Proseminar* PSY2010 *Contemporary Issues in Psychological Research (Departmental Proseminar)* PSY2500 *Social Psychology Graduate Proseminar* PSY950 *Psychology Live* *Law and Neuroscience* (Harvard Law School)

Mentoring

Postdocs	*Current:* Barbara Braams, Juliet Davidow, Katherine Powers *Past:* Catherine Glenn (co-advised with Matthew Nock)
PhD students	*Current:* Catherine Insel, Erik Nook, Alexandra Rodman, Maheen Shermohammed
Visiting students	*Past:* Nadine Abi Akar (Lebanon), Saz Ahmed (UK), Ivy Defoe (Netherlands)*, Iris Ikink (Netherlands), Bianca van den Bulk (Netherlands) * *Fulbright Scholar*
Undergraduates	*Current:* Jeremy Astesano, Amanda Brandt, Mia Charifson*, Aridenne Dews, Sandy Li, Kayla McGarrell*, Sadhana Ponnaluri, Caitlin Stavish* *Past:* Alex Barry, Emily Cherkassky, Chiemeka Ezie, Brian Huh, Lia Kaynor, Kristen Osborne*, Arielle Rabinowitz*, Ana Reyes, Marilyn Romero, Maggie Schell, Christina Uhrig, Constanza Vidal Bustamante*, Zuzanna Wojcieszak, Joan Zhang * *Senior thesis writer*

High schoolers	*Past:* Oliver George, Harrison Rohrer*
	* *Intel Science Fair competitor*
Research staff	*Current:* Katherine Kabotyanski, Erik Kastman, Laurel Kordyban, Michael Mayer, Mahalia Prater-Fahey, Constanza Vidal Bustamante
	Past: Suzanna Crowell, Megan Garrad, Nadia Haddara, Gian Klobusicky, Alea Skwara
Other	*Current:* Miwako Chimura (Bunker Hill Community College), Gina Falcone (PhD student at Suffolk University), Abigail Stark (PhD student at Suffolk University)
	Past: Yang Cai (M.Ed student at HGSE), Mingzhu He (M.Ed student at HGSE), Kevin Kent (M.Ed student at HGSE), Jahan Naghshineh (M.Ed student at HGSE), Jose Santiago (Bunker Hill Community College), Stephanie Sasse (M.Ed student at HGSE), Hannah Shulman (PhD student at Northeastern University), Sophie Turnbull (M.Ed student at HGSE)

Institutional Service

University

2015, 2016	Herchel Smith Undergraduate Fellowship Selection Committee
2015-2016	Board of Freshman Advisors
2013-Present	Member, Senior Common Room of Pforzheimer House
2013	Judge, *Neuroscience & Mental Health* poster session, Conte Center at Harvard

Departmental

2017-2018	Co-Organizer (with Max Krasnow), Cognition, Brain & Behavior Brownbag Series
2015-2016	Clinical Area Faculty Search Committee
2015-2016	Space Committee
2015-2016	Organizer, Cognition, Brain & Behavior Brownbag Series
2013-2014	Social Area Faculty Search Committee
2013-2014	Co-Organizer (with Max Krasnow), Cognition, Brain & Behavior Brownbag Series
2012-2013	Restricted Funds Committee
2012-2013	Social Area Faculty Search Committee

Public Engagement

2014-Present	Core Faculty & Juvenile Justice Group, *MGH Center for Law, Brain, & Behavior*
2013-Present	Advisory Board, *The Brain Education Project* (neuroscience literacy program)
2013-Present	Advisory Board, *The People's Science* (platform for public engagement with science)

2017

Science workshop for adolescents and teachers – Newton South High School (Newton, MA)
Subject of 3-part series on Adolescent Brain Development – *Channel One News* (Educational news program viewed by ~5 million youth in middle & high school homeroom classes)

2016

Feature article on human brain maturity – *New York Times; CNN; Cell Press; APS Member Spotlight*
Feature article on the Human Connectome Project in Development – *Harvard Gazette*
Science workshop for adolescents and teachers – Newton South High School (Newton, MA)
Keynote speaker on Adolescent Neuroscience – Belmont High School (Belmont, MA)
Science workshop for adolescents and parents – Harvard Museum of Natural History

2015

Keynote speaker on Adolescent Neuroscience for Middle School students, parents, & teachers – Ottoson Middle School (Arlington, MA)

Guest blog post – emotionnews.org, '*The emotional potency of peers during adolescence*'

2014

Keynote speaker on Adolescent Neuroscience for Boston-area high school teachers - Belmont Hill School (Belmont, MA)

School Assembly for middle & high school students - Belmont Hill School (Belmont, MA)

Keynote speaker on Adolescent Neuroscience for Boston-area high school teachers – *Exploring Neuroscience and Mental Health* Continuing Education Workshop

Workshop on Adolescent Neuroscience to high school students – King Phillip Regional High School (Wrentham, MA)

'*Brain Station*' – Brain Awareness Week Youth Conference at Harvard Graduate School of Education

2013

Workshop on Adolescent Neuroscience – Weston High School (Weston, MA)

'*Brain Station*' – Brain Awareness Week Youth Conference at Harvard Graduate School of Education

Workshop on Adolescent Neuroscience – Philips Brooks House Association, Harvard University

Guest speaker on Adolescent Neuroscience – Pierce K-8 School (Brookline, MA)

Keynote Speaker on Adolescent Neuroscience to parents, teachers and students – Chapel Hill-Chauncy Hall High School (Waltham, MA)

Experts in Emotion online interview series

2012

Keynote Speaker on Adolescent Neuroscience to parents and teachers – Science Programming for Parents, Pierce K-8 School (Brookline, MA)

Speaker on Science Careers for Women for first-generation college students, in conjunction with *The Brain: The Inside Story* exhibit – American Museum of Natural History (New York, NY)

Conference Presentations from Laboratory (past 3 years)

° indicates trainee co-author

2017

1. Braams B.R.°, Davidow J.Y.°, & Somerville L.H. (2017). Developmental trajectories of social influence on ambiguous decision-making. Talk at *Flux Developmental Neuroscience Society* (Portland, OR).

2. Bustamante C.M.V.°, Barch D.M., Bookheimer S.Y., Buckner R.L., Burgess G.C., Dapretto M. Harms M.P., Hernke C., Smith S.M., Thomas K.M., Van Essen D.C., Yacoub E., & Somerville L.H. (2017). Introducing the Human Connectome Project in Development: Task fMRI paradigms. *Flux Developmental Neuroscience Society* (Portland, OR).

3. Davidow J.Y.°, Insel C.°, Romero M.°, Zhang J.°, & Somerville L.H. (2017). Twice as nice: Learning benefits from valence and action during adolescence. *Flux Developmental Neuroscience Society* (Portland, OR).

4. Insel C.°, Kastman E.K.°, Glenn C.R.°, & Somerville L.H. (2017). Corticostriatal circuit development constrains goal directed behavior through adolescence. *Flux Developmental Neuroscience Society* (Portland, OR).

5. Kabotyanski K.°, Rodman A.M.°, Powers K.E.°, Kastman E.K.°, Stark A.°, & Somerville L.H. (2017). Using a physical effort paradigm to quantify the motivational value of small and large monetary incentives across development. *Flux Developmental Neuroscience Society* (Portland, OR).

6. Kordyban L.E.°, Barch D.M., Bookheimer S.Y., Buckner R.L., Burgess G.C., Dapretto M. Harms M.P., Hernke C., Smith S.M., Thomas K.M., Van Essen D.C., Yacoub E., & Somerville L.H. (2017). Introducing the Human Connectome Project in Development: General overview. *Flux Developmental Neuroscience Society* (Portland, OR).

7. Powers K.E.° & Somerville L.H. (2017). Evaluating the reliability and specificity of peer influence on adolescent decision making: A large scale meta-analysis. *Flux Developmental Neuroscience Society* (Portland, OR).

8. Rodman A.M.°, Powers K.E.°, Somerville L.H. (2017). The development of self-protective biases: Adolescents internalize and adults externalize evaluative social feedback. *Flux Developmental Neuroscience Society* (Portland, OR).

9. Sasse S.F.°, Nook E.K.°, Lambert H.K., McLaughlin K.A., & Somerville L.H. (2017). Characteristics of contra-hedonic decision making vary across development: Evidence from a valenced choice task. *Flux Developmental Neuroscience Society* (Portland, OR).

10. Stark A.°, Rodman A.M.°, Powers K.E.°, Kastman E.K.°, Kabotyanski K.°, & Somerville L.H. (2017). How valuable is social feedback to adolescents and adults? Objective quantification of social motivation using a physical effort paradigm. *Flux Developmental Neuroscience Society* (Portland, OR).

11. Davidow J.Y.° & Somerville L.H. (2017). The development of cognitive control for learned value associations. Talk at *New England Research on Decision Making (NERD) Annual Meeting* (Providence, RI).

12. Powers K.E.° & Somerville L.H. (2017). Consequences for peers differentially bias computations about risk across development. Talk at *New England Research on Decision Making (NERD) Annual Meeting* (Providence, RI).

13. Insel C.° & Somerville L.H. (2017). Developmental emergence of corticostriatal connectivity mediates selective improvements in cognitive control under high stakes. Talk at *Society for Research on Child Development* (Austin, TX).

14. Dews A.A.°, Nook E.C.°, Sasse S.F.°, Lambert H.K., McLaughlin K.A., & Somerville L.H. (2017). Increased alexithymia mediates the emergence of depressive symptoms from childhood to adolescence. *Society for Affective Science* (Boston, MA).

15. Nook E.C.°, Sasse S.F.°, Lambert H.K., McLaughlin K.A., & Somerville L.H. (2017). Multidimensional emotion representation development from childhood to adulthood scaffolds on general vocabulary. Talk at *Society for Affective Science* (Boston, MA).

16. Shermohammed M.°, Mehta P.H., & Somerville L.H. (2017). Does psychosocial stress impact cognitive reappraisal? Behavioral and neural evidence. *Society for Affective Science* (Boston, MA).

17. Braams B.A.°, Davidow J.Y.°, & Somerville L.H. (2017). Social influence on adolescent ambiguous and risky decision making. *Social & Affective Neuroscience Society* (Los Angeles, CA).

18. Insel C.°, Charifson M.°, Falcone G.°, & Somerville L.H. (2017). High stakes accelerate reinforcement learning. *Social & Affective Neuroscience Society* (Los Angeles, CA).

19. Nook E.C.°, Sasse S.F.°, Lambert H.K., McLaughlin K.A., & Somerville L.H. (2017). Multidimensional emotion representation development from childhood to adulthood scaffolds on general vocabulary. *Social & Affective Neuroscience Society* (Los Angeles, CA).

20. Powers K.E.°, Falcone G.°, Yaffe G., Hartley C.A., Davidow J.Y.°, Kober H., & Somerville L.H. (2017). Consequences for peers differentially bias computations about risk from adolescence to adulthood. *Social & Affective Neuroscience Society* (Los Angeles, CA).

21. Rodman A.M.°, Powers K.E.°, Kastman E.K.°, & Somerville L.H. (2017). Learning biases render adolescents vulnerable to a drop in self-esteem following peer evaluation. *Social & Affective Neuroscience Society* (Los Angeles, CA).

22. Lee N.C., Weeda W.D., Insel C.°, Somerville L.H., Krabbendram L., & Huizinga M. (2017). Neural substrates of the influence of emotional cues on cognitive control in risk-taking adolescents. *Organization for Human Brain Mapping Society* (Vancouver, Canada).

2016

23. Buckner R.L., Braga R.M., Hutchison R.M., Shermohammed M.°, Coombs G., Barnett I.J., Kiang M.V., Farfel L., Marotta M.E., Mair R.W., O'Keefe T., Meickle J., Liu H., Somerville L.H., Onnela J.-P., & Baker J.T. (2016). Deep dynamic phenotyping of the individual: A platform for precision neuroscience. *Society for Neuroscience* (San Diego, CA).

24. Davidow J.Y.°, Van Dijk K.R.A., Snyder J., Vidal C.°, Sheridan M.A., & Somerville L.H. (2016). Adaptive adjustment in cognitive control over reward in adolescence. *Society for Neuroscience* (San Diego, CA).

25. Insel C.°, Kastman E.K.°, Glenn C.R.°, Sasse S.F.°, Garrad M.C.°, & Somerville L.H. (2016). Developmental emergence of frontostriatal connectivity mediates flexible upregulation of cognitive control under high stakes. *Society for Neuroscience* (San Diego, CA).
26. Sasse S.F.°, Bialik M., Zaki J., Watson A., Abesamis G., & Somerville L.H. (2016). Sharing your science: a practical outreach workflow for researchers to promote responsible public engagement with neuroscience. *Society for Neuroscience* (San Diego, CA).

27. Shermohammed M.°, Buckner R.L., Baker J.T., Onnela J-P., & Somerville L.H. (2016). Deep dynamic phenotyping of the individual: tracking within-subject variability in social and emotional behavioral profiles using smartphones. *Society for Neuroscience* (San Diego, CA).

28. Nook E.C.°, Schleider J.L., & Somerville L.H. (2016). Discovering bidirectional relations between emotion regulation and distancing language. *Society for Research in Psychopathology* (Baltimore, MD).

29. Braams B.R.°, Davidow J.Y.°, & Somerville L.H. (2016). Social influence on adolescent ambiguous and risky decision-making. *Flux Developmental Neuroscience Society* (St. Louis, MO).

30. Davidow J.Y.°, Van Dijk K.R.A., Snyder J., Vidal C.°, Sheridan M.A., & Somerville L.H. (2016). Adaptive adjustment in cognitive control over reward in adolescence. *Flux Developmental Neuroscience Society* (St. Louis, MO).

31. Garrad M.C.°, Sasse S.F.°, Drysdale A.T., Abi Akar N.°, Insel C.°, Wilson R.C., & Somerville L.H. (2016). Exploratory decision making becomes more strategic through adolescence. *Flux Developmental Neuroscience Society* (St. Louis, MO).

32. Insel C.°, Glenn C.R.°, Kastman E.K.°, Garrad M.C.°, Sasse S.F.°, & Somerville L.H. (2016). Developmental emergence of frontostriatal connectivity mediates flexible upregulation of cognitive control under high stakes. *Flux Developmental Neuroscience Society* (St. Louis, MO).

33. Kastman E.K.°, Skwara A.C.°, Insel C.°, Rodman A.M.°, Sasse S.F.°, & Somerville L.H. (2016). The effects of uncertainty on concurrent information processing from late childhood to adulthood. *Flux Developmental Neuroscience Society* (St. Louis, MO).

34. Nook E.C.°, Sasse S.F.°, Lambert H.K., McLaughlin K.A., & Somerville L.H. (2016). Emotion concepts become more distinct across development but the ability to specifically identify one's emotions is low in adolescence. *Flux Developmental Neuroscience Society* (St. Louis, MO).

35. Powers K.E.°, Falcone G.°, Yaffe G., Kober H. & Somerville L.H. (2016). Asymmetric effects of friends' gains and losses on adolescents' risky decisions. *Flux Developmental Neuroscience Society* (St. Louis, MO).

36. Nook E.C.°, Schleider J.L., & Somerville L.H. (2016). A linguistic signature of psychological distancing in emotion regulation. *Society for Affective Science* (Chicago, IL).

37. Defoe I.N.°, Dubas J., Somerville L.H., Lugtig P., & van Aken M.A.G. (2016). The unique roles of cognitive, affective, and social factors in adolescent smoking development. *Society for Research on Adolescence* (Baltimore, MD).

38. Insel C.°, Glenn C.R.°, Kastman E.K.°, Garrad M.C.°, Sasse S.F.°, Nock M., & Somerville L.H. (2016). Recruitment of prefrontal control regions during high stakes incentives predicts persistent improvements in cognitive control. *Social & Affective Neuroscience Society* (New York, NY).

2015

39. Insel C.°, Glenn C.R.°, Kastman E.K.°, Garrad M.C.°, Sasse S.F.°, Nock M., & Somerville L.H. Immediate and lasting effects of high reward prospects on cognitive control. *Social & Affective Neuroscience Society* (Boston, MA).

40. Powers K.E.°, Somerville L.H., Kelley W.M., & Heatherton T.F. Social value modulates striatal prediction error signaling. *Social & Affective Neuroscience Society* (Boston, MA).

41. Rodman A.M.°, Insel C.°, Skwara A.C.°, Kastman E.K.°, Sasse S.F.°, & Somerville L.H. Reduced cognitive interference by temporal uncertainty in adolescence. *Social & Affective Neuroscience Society* (Boston,

MA).

42. Shermohammed M.°, Skwara A.C.°, Ezie C.E.C.°, Rabinowitz A.G.°, & Somerville L.H. Attenuation of physiological arousal to uncertainty during the adolescent transition. *Social & Affective Neuroscience Society* (Boston, MA).

43. Insel C.°, Glenn C.R.°, Kastman E.K.°, Garrad M.C.°, Sasse S.F.°, Nock M., & Somerville L.H. Immediate and lasting effects of high reward prospects on cognitive control. *Association for Psychological Science* (New York, NY).

44. Rodman A.M.°, Insel C.°, Skwara A.C.°, Kastman E.K.°, Sasse S.F.°, & Somerville L.H. Reduced cognitive interference by temporal uncertainty in adolescence. *Association for Psychological Science* (New York, NY).

45. Shermohammed M.°, Skwara A.C.°, Ezie C.E.C.°, Rabinowitz A.G.°, & Somerville L.H. Attenuation of physiological arousal to uncertainty during the adolescent transition. *Association for Psychological Science* (New York, NY).

46. Insel C.°, Glenn C.R.°, Kastman E.K.°, Sasse S.F.°, Garrad M.C.°, Nock M., & Somerville L.H. (2015). High-stakes rewards and punishments induce "choking" behavior in adolescent reactive cognitive control: Behavioral evidence and frontostriatal mechanisms. *Flux Developmental Neuroscience Society* (Leiden, Netherlands).

47. Insel C., Glenn C.R., Kastman E.K., Sasse S.F., Garrad M.C., Nock M., & Somerville L. H. (2015). High stakes rewards and punishments induce "choking" behavior in adolescent reactive cognitive control: Behavioral evidence and frontostriatal mechanisms. *Talk at VNOP-ISED-CAS Research Days Conference* (Leiden, Netherlands).