

PSYC W3620x

Developmental Psychopathology

Fall, 2009

Catherine Monk, Ph.D.

Office hours: 11–12 pm on Wednesday, 405 Schermerhorn

or by appointment

cem31@columbia.edu

This is a seminar course for 4 points. The class will meet Wednesdays, 12:10–2 pm in room 200C Schermerhorn Hall

Brief course description:

Developmental psychopathology posits that it is aspects of development itself that have gone awry when there is psychopathology. As such, it seeks to understand the early and multiple factors contributing to psychopathology emerging in childhood and later in life, views development as an ongoing dynamic process, and is committed to the possibility of intervention to bring about better adaptation. This course will begin with an overview of the field and foundational concepts, and then move to various foci for understanding maladaptive development (e.g. the role of genes, social influences). It then will examine key domains that serve as risk factors (e.g. temperament) and current research in specific diagnostic areas (e.g., Attention Deficit Hyperactivity Disorder). The course will conclude with a critical examination of the tension between the influence of the psychiatric perspective and a newly emerging research paradigm. The former threatens to replace the developmental approach to psychopathology with a medical/ diagnostic one emphasizing the labeling (and medicating) of (static) conditions. In contrast, a research–driven perspective now identifies all mental illnesses, even those seen in adults, as neurodevelopmental disorders. Throughout the course, students will be encouraged to relate empirical findings to the field’s theoretical models as well as to examine the prevailing scientific ideology guiding research programs.

Course requirements:

Each week students will attend a two–hour seminar. No later than 5 pm of the proceeding evening, students will submit (via email) to the professor **three questions** about that week’s readings (none based on the same paper unless there are only two papers). These questions will be used to launch discussion during each meeting. For the first few course meetings, the instructor will use one–half to one hour of meeting time for lectures that will provide historical context, background, and conceptual explication. For the remaining sessions, students will be assigned a week for which they will lead a portion of the discussion. (Depending on class size and preference, students can do this individually or in pairs.) In addition to these readings, students will complete two take home assignments, one at the mid point in the year, due in class on **October 14**, one as a final project due in class on Wednesday, **December 9**. For the mid term, students will respond to 2 out of 3 take home essays, each about 2 to 3 pages in length. For the final, students will respond to 3 out of 4 take home essays, also each about 2 to 3 pages in length.

A note about the weekly questions: These are to be integrative, and to reflect thoughtfulness about the class readings; They should not be one sentence 'why' questions, or 'has this ever been looked at' questions, as those can begin to be answered with a little investigative work on one's own.

Grading will be allocated as follows:

Weekly questions: 25%

Participation in discussion: 15%

Class leader: 20%

Mid term essays 15%

Final essay 25%

Readings and weekly syllabus:

Papers are readily available to download via the CU system or PubMed. (Occasionally an article will be hard to find, in which case I will upload it on our CourseWorks site.)

Session 1: Sept 9: Overview

Session 2: September 16: Developmental perspectives on psychopathology

1. Sroufe, L.A. (1997). Psychopathology as an outcome of development. *Development and Psychopathology*, 9: 251–268.
2. Rutter, M, Sroufe, L.A. (2000) Developmental psychopathology: concepts and challenges. *Dev Psychopathol*; 12(3): 265-96.
3. Cicchetti, D. (1984). The emergence of developmental psychopathology. *Child Development*, 55: 1-7.
4. Eisenberg, L. (1977). Development as a unifying concept in psychiatry. *British Journal of Psychiatry*, 131: 225-237.

Other recommendations for optional reading:

1. Steele, H., & Steele, M. (1999). Psychoanalytic views about development in David Messer & Stuart Miller (Eds) *Exploring Developmental Psychology* (pp 263–283). London: Francis Arnold.
2. Achenbach, T. (1990). What is "developmental" about developmental psychopathology? In J. Rolf, A. Masten, D. Cicchetti, K. Nuechterlein, and S. Weintraub (Eds.), *Risk and Protective Factors in the Development of Psychopathology* (pp. 29-48). New York: Cambridge University Press.

3. Cicchetti, D. & Cohen, D. J. (1995). Perspectives on developmental psychopathology. In D. Cicchetti D. J. Cohen, Eds. *Developmental Psychopathology* (pp. 3-20). New York: Wiley & Sons.

Session 3: September 23: Models of development — Psychological transmission

1. Kraemer, S., Steele, H., Holmes, J. A tribute to the legacy of John Bowlby at the centenary of his birth (2007). *Attachment & Human Development*, 9 (4), 303 –306.
2. Main M. (1996) Introduction to the special section on attachment and psychopathology: 2. Overview of the field of attachment. *J Consult Clin Psychol*. Apr; 64(2): 237-43.
3. Fonagy, P., Steele, H., & Steele, M. (1991). Maternal representations of attachment during pregnancy predict the organization of infant–mother attachment at one year. *Child Development*, 62 (5), 891 –905.
4. Saribay, S.J. & Andersen, S.M. (2007). Are past relationships at the heart of attachment dynamics? What love has to do with it. *Psychological Inquiry*, 18 (3), 183 –191.

Recommendations for optional reading:

1. Malcolm, J. (1980) *Psychoanalysis: The Impossible Profession*. New York, Knopf.
2. Sroufe L.A. (2005). Attachment and development: a prospective, longitudinal study from birth to adulthood. *Attach Hum Dev*. Dec; 7(4): 349-67.
3. Hazen, C. & Shaver, P. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology*, 53 (3), 511–524.
4. van Ijzendoorn, M.H. (1995). Adult attachment representations, parental responsiveness, and infant attachment: a meta-analysis on the predictive validity of the Adult Attachment Interview. *Psychol Bull*. May;117(3):387-403.
5. Fonagy, Peter; Target, Mary. Attachment and reflective function: Their role in self-organization. *Development and Psychopathology*.

6. Joffe, W.G., & Sandler, J.(1968) Comments on the psychoanalytic psychology of adaptation, with special reference to the role of affects and the representational world. *Int J Psychoanal.* ;49(2):445-56.
7. Mayes, L & Cohen, D. J. (1996). Anna Freud and developmental psychoanalytic psychology. *Psychoanalytic Study of the Child*, 51, 117–141.

Session 4: September 30 Models of development — nature versus nurture (?)

1. Logan, C.A., & Johnston, T.D., (2007). Synthesis and separation in the history of “nature” and “nurture. *Dev Psychobio*, 49 (8), p.758–69.
2. Gottesman, I.I. & Hanson, D.R. (2005). Human development: Biological and genetic processes. *Annual Review of Psychology* 56: 263–286.
3. Belsky, J. & Pluess, M. (2009). The nature (and nurture?) of plasticity in early human development. *Perspectives on Psychological Science*, 4 (4) 345 – 351.
4. Holden, C. Back to the drawing board for psychiatric genetics (2009). *Science*, June 26, 324 (5935), 1628.

Recommendations for optional reading:

1. Risch, N. Herrell, R., Lehner, T. et al. (2009). Interaction between the serotonin transporter gene (5-HTTLPR), stressful life events, and risk for depression: A meta-analysis. *Journal of the American Medical Association*, 301, (23) 2462–2471.
2. McClearn, G. E. (2004). Nature and nurture: Interaction and co-activation *American Journal of Medical Genetics Part B (Neuropsychiatric Genetics)* 124B: 124–130.
5. Caspi, A & Moffitt, T. (?). Gene–environment interactions in psychiatry: joining forces with neuroscience.
3. Weaver, I.C.G. Epigenetic programming by maternal behavior and pharmacological intervention: Nature versus Nurture: Let’s call the whole thing off (2007). *Epigenetics*, 2:1, 22–28.
4. Kendler, K.S. (2005) "A gene for...": the nature of gene action in psychiatric disorders. *Am J Psychiatry*; 162(7): 1243-52.

5. State, M.W., Lombroso, P.J., Pauls, D.L., Leckman, J.F. (2000). The genetics of childhood psychiatric disorders: a decade of progress. *J Am Acad Child Adolesc Psychiatry*; 39(8):946-62.
6. McGue, M & Thomas, J. B. (1998). Genetic and environmental influences on human behavioral differences *Annual Review of Neuroscience*, 21: 1–24.

Session 5: October 7: Models of development — Experience and brain/body effects

1. Lupien, S.J., McEwen, B. S., Gunnar, M. R., & Heim, C. (2009). Effects of stress throughout the lifespan on brain, behaviour, and cognition. *Nat Review Neurosci*, June 10 (6), 434–445.
2. Grossman, A. W., Churchill, J.D., McKinney, B.C., Kodish, I.M., Otte, S.L., Greenough, W.T. (2003). Experience effects on brain development: possible contributions to psychopathology. *J Child Psychol Psychiatry*. Jan 44(1): 33-63.

Recommendations for optional reading:

1. Ouellet–morin, I., Boivin, M., Dionne, G., Lupien, S.J., Arseneault, L., Barr, R.G., Perusse, D., Tremblay, R.E. (2008). Variations in heritability of cortisol reactivity to stress as a function of early familial adversity among 19–month old twins. *Archives of General Psychiatry*; 65 (2).
2. Heim, C, Plotsky, P.M., & Nemeroff, C. B. (2004). Importance of studying the contributions of early adverse experience to neurobiological findings in depression. *Neuropharmacology*, 29, p.641–648.
3. Buss, C., Lord, C., Wadiwalla, M., Hellhammer, D.H., Lupien, S.J., Meaney, M.J., & Prussner, J.C. (2007). Maternal care modulates the relationship between prenatal risk and hippocampal volume in women but not men. *The Journal of Neuroscience*, 27 (10), 2592 – 2595.
4. Greenough, W. T., Black, J. E., and Wallace, C. S. (1987). Experience and brain development. *Child Development*, 58, 539-559.
5. Marler, P. (1991). The instinct to learn. In S. Carey and R. Gelman (Eds.), *The Epigenesis of mind: Essays on biology and cognition* (pp. 37-66). Hillsdale, NJ: Erlbaum..

6. Gutman, D.A. & Nemeroff, C.B. (2003). Persistent central nervous system effects of an adverse early environment: clinical and preclinical studies. *Physiol Behav.* Aug;79(3):471-8.

Session 6: October 14: Very early foundations: MID TERM DUE

1. Talge, N. M., Neal, C., Glover, V., et al., (2007). Antenatal maternal stress and long-term effects on child neurodevelopment: how and why? *Journal of Child Psychology and Psychiatry*, 48 (3), 245 –261.
2. O'Donnell, K., O'Connor, T.G., & Glover, V. (2009). Prenatal stress and neurodevelopment of the child: Focus on the HPA axis and role of the placenta. *Developmental Neuroscience*, 31, 285–292.
3. DiPietro, J.A., Ghera, M.M., & Costigan, K.A. (2008). Prenatal origins of temperamental reactivity in early infancy. *Early Human Development*.

Recommendations for optional reading:

1. O'Connor TG, Heron J, Golding J, Glover V; ALSPAC Study Team. (2003) Maternal antenatal anxiety and behavioural/emotional problems in children: a test of a programming hypothesis. *J Child Psychol Psychiatry*. Oct; 44(7):1025-36.
 2. Beebe, Beatrice. (2000). Constructing mother-infant distress: The microsynchrony of maternal impingement and infant avoidance in the face-to-face encounter. *Psychoanalytic Inquiry*. Vol 20(3) 2000, 421-440.
 3. Kochanska, G & Aksan, N. (2004) Development of mutual responsiveness between parents and their young children. *Child Dev*. Nov-Dec; 75(6): 1657-76.
-
1. Feldman R. (2006) From biological rhythms to social rhythms: Physiological precursors of mother-infant synchrony. *Dev Psychol* Jan;42(1):175-88.
 2. Crockenberg S.C. & Leerkes, E.M. (2004) Infant and maternal behaviors regulate infant reactivity to novelty at 6 months. *Dev Psychol*. Nov;40(6):1123-32.

3. Jaffe J, Beebe B, Feldstein S, Crown CL, Jasnow MD. (2001) Rhythms of dialogue in infancy: coordinated timing in development. *Monogr Soc Res Child Dev*; 66(2):i-viii, 1-132.
4. van den Bergh, B.R., Mennes, M., Stevens, V., van der Meere, J., Borger, N., Stiers, P., Marcoen, A, Lagae, L. (2006) ADHD deficit as measured in adolescent boys with a continuous performance task is related to antenatal maternal anxiety. *Pediatr Res*. Jan;59(1):78-82.
5. DiPietro, JA, Novak, M.F.S.X, Costigan, K.A., Atella, L.D., & Reusing, S.P. (2006). Maternal psychological distress during pregnancy in relation to child development at age two. *Child Development*, 77 (3), 573–587.
6. Bergman, K., Sarkar, P., O'Connor, T.G., Modi, N., & Glover, V. (2007). Maternal stress during pregnancy predicts cognitive ability and fearfulness in infancy, *Journal American Academy of Child and Adolescent Psychiatry*, 46 (11), 1454 – 1463.
7. Werner, E. A, Myers, M.M., Fifer, W.P., Cheng, B., Fang, Y. & Monk, C. Prenatal predictors of 4 month temperament, *Developmental Psychobiology*, 2007, 49 (5), 474–484.
8. O'Connor, T.G., Ben-Shlomo, Y., Heron, J., Golding, J., Adams, D., & Glover, V. (2005) Prenatal anxiety predicts individual differences in cortisol in pre-adolescent children. *Biol Psychiatry*. 2005 Aug 1;58(3):211-7.
9. Glover, V. & O'Connor, T.G. (2002) Effects of antenatal stress and anxiety: Implications for development and psychiatry. *Br J Psychiatry*. May;180:389-91.
10. Van den Bergh, B.R., Mulder, E.J., Mennes, M., & Glover, V. (2005) Antenatal maternal anxiety and stress and the neurobehavioural development of the fetus and child: links and possible mechanisms. A review. *Neurosci Biobehav Rev*. Apr;29(2):237-58.
11. Monk C, Sloan RP, Myers MM, Ellman L, Werner E, Jeon J, Tager F, Fifer WP. (2004) Fetal heart rate reactivity differs by women's psychiatric status: an early marker for developmental risk? *J Am Acad Child Adolesc Psychiatry*. Mar;43(3):283-90.

Session 7: October 21: Temperament & emotion regulation

CHOICES FOR PLAY, NEXT TO NORMAL: MONDAY OCT 19, TUES OCT 20, TUESDAY OCT 27; WHICH EVER NIGHT WE SEE THE PLAY, 'TEMPERAMENT' WILL FOLLOW AS CLASS TOPIC

* For the class following the play, in lieu of standard questions from the readings, please bring to class the following written assignment: 2 comments relating the play to our readings so far; 1 question on the temperament readings.

1. Rettew, D.C. & McKee, L. (2005) Temperament and its role in developmental psychopathology. *Harv Rev Psychiatry*. Jan-Feb;13(1):14-27.
2. Rothbart, M.K., (1981) Measurement of temperament in infancy. *Child Development*, 52, 569–578.

Recommendations for optional reading:

1. Edgar–Perez, K., Schmidt, L. A., Henderson, H.A., Schulkin, J., & Fox, N.A. (2008). Salivary cortisol levels and infant temperament shape developmental trajectories in boys at risk for behavioral maladjustment. *Psychoneuroendocrinology*, 33, 916–925.
2. Goldsmith, H.H., Davidson, R.J. (2004) Disambiguating the components of emotion regulation. *Child Dev* Mar-Apr; 75(2): 361-5.
3. Southam-Gerow, M.A. & Kendall, P.C. (2002) Emotion regulation and understanding: implications for child psychopathology and therapy. *Clin Psychol Rev*. Mar;22(2):189-222. Review.
4. Goldsmith, H.H. & Lemery, K.S. (2000). Linking temperamental fearfulness and anxiety symptoms: a behavior-genetic perspective. *Biol Psychiatry*. Dec 15;48(12):1199-209.
5. Campos, J.J. & Frankel, C.B. & Camras, L. (2004) On the nature of emotion regulation. *Child Dev*. 2004 Mar-Apr; 75 (2): 377-94.
6. Silk, J.S., Shaw, D.S., Skuban, E.M., Oland, A.A., & Kovacs, M. (2006) Emotion regulation strategies in offspring of childhood-onset depressed mothers. *J Child Psychol Psychiatry*. Jan;47(1):69-78.
7. Silk, J.S., Shaw, D.S., Forbes, E.E., Lane, T.L., Kovacs, M. (2006) Maternal depression and child internalizing: the moderating role of child emotion regulation. *J Clin Child Adolesc Psychol*. Feb;35(1):116-26.

Session 8: October 28: Depression

1. Goodman, S.H. & Gottlib, I.H. (1999). Risk for psychopathology in the children of depressed mothers: A developmental model for understanding mechanisms of transmission, *Psychological Review*, 106 (3), 458 – 490.
2. Bowlby, J. (1988) Developmental psychiatry comes of age. *Am J Psychiatry*. Jan; 145(1):1-10. Review.
3. Peterson, B.S. Warner, V., BAnsal, R., et al. (2009) Cortical thinning in persons at increased familial risk for major depression. *Proceedings of the National Academy of Sciences* 106 (15), 6273 – 6278

Recommendations for optional reading:

1. Dawson, G., Ashman, S.B., Panagiotides, H., Hessl, D., Self, J., Yamada, E., Embry, L. (2003) Preschool outcomes of children of depressed mothers: role of maternal behavior, contextual risk, and children's brain activity. *Child Dev*. Jul-Aug;74(4):1158-75.
2. Belden, AC, Sullivan, JP, & Luby, JL (2007). Depressed and healthy preschoolers' internal representations of their mothers' caregiving: associations with observed caregiving behaviors one year later. *Attach Human Dev*, Sep (9), 239–54.
3. Jaffee, S.R., Moffitt, T.E., Caspi, A., Fombonne, E., Poulton, R. & Martin, J. (2002) Differences in early childhood risk factors for juvenile-onset and adult-onset depression. *Arch Gen Psychiatry* Mar;59(3):215-22.
4. Luby, J.L., Sullivan, J., Belden, A., Stalets, M., Blankenship, S. & Spitznagel, E. (2006) An observational analysis of behavior in depressed preschoolers: further validation of early-onset depression. *J Am Acad Child Adolesc Psychiatry*. Feb;45(2):203-12.
5. Bowlby, J. (1961) Childhood mourning and its implications for psychiatry. *Am J Psychiatry*. Dec;118:481-98.

Session 9: November 4: Autism

1. Zwaigenbaum, L., Bryson, S., Lord, C., et al. (2009) Clinical assessment and management of toddlers with suspected autism spectrum disorders: Insights from studies of high-risk infants *Pediatrics* 123, 1383 – 1391.
2. Dawson, G. (2008). Early behavioral intervention, brain plasticity, and the prevention of autism spectrum disorder *Development and Psychopathology*, 20, 775–803.
3. Klin, A. (2009) Embracing the challenge of bold theories of autism *British Journal of Psychology* 100, 29–32.
4. Rutter, M. Commentary: Fact and artefact in the secular increase in the rate of autism. *International Journal of Epidemiology*, 1-2.

Session 10: November 11: Schizophrenia — a neurodevelopmental disorder?

1. Fruntes, V & Limosin, F. (2008). Schizophrenia and viral infection during neurodevelopment: a pathogenesis model? *Med Sci Monit*, 14 (6), RA71–77.
2. Malaspina, D., Corcoran, C., Kleinhaus, K.R., Perrin, M.C., Fenning, S., Nahon, D., Friedlander, Y, & Harlap, S. (2008). Acute maternal stress in pregnancy and schizophrenia in offspring: A cohort prospective study. *BMC Psychiatry*, 8, p.71.
3. Cannon, M., Clarke, M.C. (2005). Risk for schizophrenia--broadening the concepts, pushing back the boundaries *Schizophr Res*. Nov 1;79(1):5-13.

Recommendations for optional reading:

1. Walsh, T. et al. Rare structural variants disrupt multiple genes in neurodevelopmental pathways in schizophrenia (2008). *Science*, 320, p. 1126.
2. Henquet, C., Di Forti, M., Morrison, P., Kuepper, R., & Murray, R. M. (2008). Gene–environment interplay between cannabis and psychosis. *Schizophrenia Bulletin* (advanced on line publication).
3. Ordonez, A.E., Bobb, A., Greenstein, D., Baker, N., Sporn, A., Lenane, M., Malaspina, D., Rapaport, J., & Gogtay, N. (2005) Lack of evidence for elevated obstetric complications in childhood onset schizophrenia. *Biol Psychiatry*. Jul 1;58(1):10-5.

4. Ashdown, H., Dumont, Y., Ng, M., Poole, S., Boksa, P., Luheshi, G.N. (2006) The role of cytokines in mediating effects of prenatal infection on the fetus: implications for schizophrenia. *Mol Psychiatry*. Jan;11(1):47-55.
5. Opler, M.G. & Susser, E.S. (2005) Fetal environment and schizophrenia. *Environ Health Perspect*. Sep;113(9):1239-42.

Session 11: November 18: SES factors

1. Xue, Y., Leventhal, T., Brooks-Gunn, J., & Earls, F. (2005). Neighborhood residence and mental health problems of 5- to 11-year olds. *Archives of General Psychiatry*, 62, p. 554-563.
2. Evans, G.W., Gonnella, C., Marcynyszyn, Gentile, L, & Salpekar, N. The role of chaos in poverty and children's socioemotional adjustment (2005). *Psychological Science*, 16 (7), p. 560-5.
3. Lupien, S.J., King, S., Meaney, M.J. & McEwen (2001). Can poverty get under your skin? Basal cortisol levels and cognitive function in children from low and high socioeconomic status *Dev Psychopathol*;13: 653-676.

Recommendations for optional reading:

1. Tracy, M., Zimmerman, F.J., Galea, S., McCauley, E., Vander Stoep, A. (2008). What explains the relation between family poverty and childhood depressive symptoms? *Journal of Psychiatric Research*.

Session 12: November 25: To diagnose (or not)

1. Crews, F.C. (2007). Talking back to Prozac. *NYRB*, 54 (19)
2. Marsh, R., Maia, T. V., & Peterson, B. S. (2009). Functional disturbances within frontostriatal circuits across multiple childhood pathologies *American Journal of Psychiatry*, 166 (6), 664 – 674.
3. Brown, T. & Barlow, D. H. (2009). A proposal for a dimensional classification system based on the shared features of DSM-IV anxiety and mood disorders: Implications for assessment and treatment *Psychological Assessment*, 21 (3), 256-271.

Recommendations for optional reading:

1. Sterbe, S. Egger, H. L., & Angold, A. (2007). Diagnostic specificity and nonspecificity in the dimensions of preschool psychopathology. *Journal of Child Psychology & Psychiatry*, 48 (10), p.1005–1013.
2. Luby, J.L., Stalets, M.M. & Belden, A.C. (2007). Psychotropic prescriptions in a sample including both healthy and mood and disruptive disordered preschoolers: relationships to diagnosis, impairment, prescriber type, and assessment method. *Journal Child Adolesc Psychopharmacology*, 17 (2), p.205–15.
3. Kean, B. (2005). The Risk Society and attention deficit hyperactivity disorder (ADHD): a critical social research analysis concerning the development and social impact of the ADHD diagnosis. *Ethical Hum Psychol Psychiatry*. Summer;7(2):131-42.
4. Link, H. L. & Angold, A.A. (in press). The Preschool Age Psychiatric Assessment (PAPA): A structured parent interview for diagnosing psychiatric disorders in preschool children. In R. Delcarmen–Wiggins and A. Carter (Eds.) *Handbook of Infant & Toddler Mental Health Assessment*. New York, NY: Oxford University Press.
5. Elliott, C. (2008), Guinea–pigging, *The New Yorker*, January, 8. 36-42.
6. Wakschlag, L.S., Leventhal, B.L., Briggs-Gowan, M.J., Danis, B., Keenan, K., Hill C., Egger, H.L., Cicchetti, D., Carter, A.S. (2005) Defining the "disruptive" in preschool behavior: what diagnostic observation can teach us *Clin Child Fam Psychol Rev*. Sep;8(3):183-201.
7. *Diagnostic Classification 0–3* (1994). Classification of Mental Health and Developmental Disorders of Infancy and Early Childhood. Arlington, VA: National Center for Clinical Infant Programs.

Session 13: December 2: Intervention

1. Lieberman, Alicia F. (2002). Treatment of attachment disorders in infant–parent psychotherapy. In Maldonado-Duran, J. Martin (Ed). *Infant and toddler mental health: Models of clinical intervention with infants and their families*. (pp. 105-128). Washington, DC, US: American Psychiatric Publishing, Inc. **WILL NEED TO MAKE PDF FOR CLASS**
2. Forman, D. R., O'Hara, M.W., Stuart, S., Gorman, L., Larsen, K.E., & Coy, C.C. (2007). Effective treatment for postpartum depression is not sufficient to improve the developing mother–child relationship. *Development and Psychopathology*, 19, 585–602.
3. Nemeroff, C.B., Heim, C.M., Thase, M.E., et al., (2003). Differential responses to psychotherapy versus pharmacotherapy in patients with

chronic forms of major depression and childhood trauma. *PNAS*, 100, p.14293.

Recommendations for optional reading:

4. Bowlby J. (1978). Attachment theory and its therapeutic implications. *Adolesc Psychiatry*; 6:5-33.

Session 14: December 9 FINAL EXAM DUE
WRAP UP

1. Hane, A.A. & Fox, N.A. (2006). Ordinary variations in maternal caregiving influence human infants' stress reactivity. *Psychological Science*, 17 (6), 550-556.