**Supplementary Material**

Table of experimental studies discussed in the review, indicating per section of the review the studies on humans and animals.

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| **Section 2: Endocrinology of Caregiving** | |
|  | ***Animal data*** |
| Banerjee, S. B. & Liu, R. C. (2013). Storing maternal memories: hypothesizing an interaction of experience and estrogen on sensory cortical plasticity to learn infant cues. *Frontiers in Neuroendocrinology* *34*(4), 300-14.  Bosch, O. J., Meddle, S. L., Beiderbeck, D. I., Douglas, A. J. & Neumann, I. D. (2005). Brain oxytocin correlates with maternal aggression: link to anxiety. *Journal of Neuroscience* *25*(29), 6807-15.  Bosch, O. J. & Neumann, I. D. (2008). Brain vasopressin is an important regulator of maternal behavior independent of dams' trait anxiety. *Proceedings of the National Academy of Sciences of the United States of America* *105*(44), 17139-44.  Dumais, K. M. & Veenema, A. H. (2015). Vasopressin and oxytocin receptor systems in the brain: Sex differences and sex-specific regulation of social behavior. *Frontiers in Neuroendocrinology*.  Hitti, F. L. & Siegelbaum, S. A. (2014). The hippocampal CA2 region is essential for social memory. *Nature* *508*(7494), 88-92.  MacLean, P. D. (1985). Brain evolution relating to family, play, and the separation call. *Archives of General Psychiatry* *42*(4), 405-17.  Neumann, I. D. (2009). The advantage of social living: brain neuropeptides mediate the beneficial consequences of sex and motherhood. *Frontiers in Neuroendocrinology* *30*(4), 483-96.  Saltzman, W. & Maestripieri, D. (2011). The neuroendocrinology of primate maternal behavior. *Progress in Neuro-Psychopharmacology and Biological Psychiatry* *35*(5), 1192-204.  Storey, A. E. & Ziegler, T. E. (2016). Primate paternal care: Interactions between biology and social experience. *Hormones and Behavior* *77*, 260-71.  Zeidan, M., Igoe, S., Linnman, C., Vitalo, A., Levine, J., Klibanski, A., Goldstein, J. & Milad, M. (2011). Estradiol modulates medial prefrontal cortex and amygdala activity during fear extinction in women and female rats. *Biological Psychiatry* *70*(10), 920-7. | |
|  | ***Human data*** |
| Apter-Levi, Y., Zagoory-Sharon, O. & Feldman, R. (2014). Oxytocin and vasopressin support distinct configurations of social synchrony. *Brain Research* *1580*, 124-32.  Bakermans-Kranenburg, M. & Van IJzendoorn, M. (2013). Sniffing around oxytocin: review and meta-analyses of trials in healthy and clinical groups with implications for pharmacotherapy. *Translational psychiatry* *3*(5), e258.  Bartz, J. A., Zaki, J., Bolger, N. & Ochsner, K. N. (2011). Social effects of oxytocin in humans: context and person matter. *Trends in Cognitive Science* *15*(7), 301-9.  Berger, J., Heinrichs, M., von Dawans, B., Way, B. M. & Chen, F. S. (2016). Cortisol modulates men’s affiliative responses to acute social stress. *Psychoneuroendocrinology* *63*, 1-9.  Bos, P. A., Hermans, E. J., Montoya, E. R., Ramsey, N. F. & van Honk, J. (2010a). Testosterone administration modulates neural responses to crying infants in young females. *Psychoneuroendocrinology* *35*(1), 114-21.  Bos, P. A., Hermans, E. J., Ramsey, N. F. & van Honk, J. (2012a). The neural mechanisms by which testosterone acts on interpersonal trust. *NeuroImage* *61*(3), 730-7.  Bos, P. A., Montoya, E. R., Terburg, D. & van Honk, J. (2014). Cortisol administration increases hippocampal activation to infant crying in males depending on childhood neglect. *Human Brain Mapping* *35*(10), 5116-26.  Bos, P. A., Terburg, D. & van Honk, J. (2010b). Testosterone decreases trust in socially naive humans. *Proceedings of the National Academy of Sciences of the United States of America* *107*(22), 9991-5.  Bos, P. A., Van Honk, J., Ramsey, N. F., Stein, D. J. & Hermans, E. J. (2013). Testosterone administration in women increases amygdala responses to fearful and happy faces. *Psychoneuroendocrinology* *38*(6), 808-17.  Brown, S. L., Fredrickson, B. L., Wirth, M. M., Poulin, M. J., Meier, E. A., Heaphy, E. D., Cohen, M. D. & Schultheiss, O. C. (2009). Social closeness increases salivary progesterone in humans. *Hormones and Behavior* *56*(1), 108-11.  Brunnlieb, C., Nave, G., Camerer, C. F., Schosser, S., Vogt, B., Münte, T. F. & Heldmann, M. (2016). Vasopressin increases human risky cooperative behavior. *Proceedings of the National Academy of Sciences* *113*(8), 2051-6.  Chelnokova, O., Laeng, B., Eikemo, M., Riegels, J., Løseth, G., Maurud, H., Willoch, F. & Leknes, S. (2014). Rewards of beauty: the opioid system mediates social motivation in humans. *Molecular Psychiatry* *19*(7), 746-7.  Cohen-Bendahan, C. C., Beijers, R., van Doornen, L. J. & de Weerth, C. (2015). Explicit and implicit caregiving interests in expectant fathers: Do endogenous and exogenous oxytocin and vasopressin matter? *Infant Behavior and Development* *41*, 26-37.  De Dreu, C. K., Greer, L. L., Handgraaf, M. J., Shalvi, S., Van Kleef, G. A., Baas, M., Ten Velden, F. S., Van Dijk, E. & Feith, S. W. (2010). The neuropeptide oxytocin regulates parochial altruism in intergroup conflict among humans. *Science* *328*(5984), 1408-11.  De Dreu, C. K., Greer, L. L., Van Kleef, G. A., Shalvi, S. & Handgraaf, M. J. (2011). Oxytocin promotes human ethnocentrism. *Proceedings of the National Academy of Sciences of the United States of America* *108*(4), 1262-6.  Ditzen, B., Schaer, M., Gabriel, B., Bodenmann, G., Ehlert, U. & Heinrichs, M. (2009). Intranasal oxytocin increases positive communication and reduces cortisol levels during couple conflict. *Biological Psychiatry* *65*(9), 728-31.  Endendijk, J. J., Hallers-Haalboom, E. T., Groeneveld, M. G., van Berkel, S. R., van der Pol, L. D., Bakermans-Kranenburg, M. J. & Mesman, J. (2016). Diurnal testosterone variability is differentially associated with parenting quality in mothers and fathers. *Hormones and Behavior* *80*, 68-75.  Fleming, A. S., Corter, C., Stallings, J. & Steiner, M. (2002). Testosterone and prolactin are associated with emotional responses to infant cries in new fathers. *Hormones and Behavior* *42*(4), 399-413.  Fleming, A. S., Ruble, D., Krieger, H. & Wong, P. Y. (1997a). Hormonal and experiential correlates of maternal responsiveness during pregnancy and the puerperium in human mothers. *Hormones and Behavior* *31*(2), 145-58.  Fleming, A. S., Steiner, M. & Corter, C. (1997b). Cortisol, hedonics, and maternal responsiveness in human mothers. *Hormones and Behavior* *32*(2), 85-98.  Gettler, L. T., McDade, T. W., Feranil, A. B. & Kuzawa, C. W. (2011). Longitudinal evidence that fatherhood decreases testosterone in human males. *Proceedings of the National Academy of Sciences of the United States of America* *108*(39), 16194-9.  Gingnell, M., Engman, J., Frick, A., Moby, L., Wikström, J., Fredrikson, M. & Sundström-Poromaa, I. (2013). Oral contraceptive use changes brain activity and mood in women with previous negative affect on the pill—a double-blinded, placebo-controlled randomized trial of a levonorgestrel-containing combined oral contraceptive. *Psychoneuroendocrinology* *38*(7), 1133-44.  Gordon, I., Zagoory-Sharon, O., Leckman, J. F. & Feldman, R. (2010). Prolactin, oxytocin, and the development of paternal behavior across the first six months of fatherhood. *Hormones and Behavior* *58*(3), 513-8.  Hahn, A. C., DeBruine, L. M., Fisher, C. I. & Jones, B. C. (2015). The reward value of infant facial cuteness tracks within-subject changes in women's salivary testosterone. *Hormones and Behavior* *67*, 54-9.  Heinrichs, M., Baumgartner, T., Kirschbaum, C. & Ehlert, U. (2003). Social support and oxytocin interact to suppress cortisol and subjective responses to psychosocial stress. *Biological Psychiatry* *54*(12), 1389-98.  Heinrichs, M., Neumann, I. & Ehlert, U. (2002). Lactation and stress: protective effects of breast-feeding in humans. *Stress* *5*(3), 195-203.  Hermans, E. J., Bos, P. A., Ossewaarde, L., Ramsey, N. F., Fernandez, G. & van Honk, J. (2010). Effects of exogenous testosterone on the ventral striatal BOLD response during reward anticipation in healthy women. *NeuroImage* *52*(1), 277-83.  Hermans, E. J., Ramsey, N. F. & van Honk, J. (2008). Exogenous testosterone enhances responsiveness to social threat in the neural circuitry of social aggression in humans. *Biological Psychiatry* *63*(3), 263-70.  Hermans, E. J., van Wingen, G., Bos, P. A., Putman, P. & van Honk, J. (2009). Reduced spontaneous facial mimicry in women with autistic traits. *Biological Psychology* *80*(3), 348-53.  Hsu, D. T., Sanford, B. J., Meyers, K. K., Love, T. M., Hazlett, K. E., Wang, H., Ni, L., Walker, S. J., Mickey, B. J. & Korycinski, S. T. (2013). Response of the μ-opioid system to social rejection and acceptance. *Molecular Psychiatry* *18*(11), 1211-7.  Inagaki, T. K., Ray, L. A., Irwin, M. R., Way, B. M. & Eisenberger, N. I. (2016). Opioids and social bonding: Naltrexone reduces feelings of social connection. *Social cognitive and affective neuroscience*, nsw006.  Kuo, P. X., Carp, J., Light, K. C. & Grewen, K. M. (2012). Neural responses to infants linked with behavioral interactions and testosterone in fathers. *Biological Psychology* *91*(2), 302-6.  Kuo, P. X., Saini, E. K., Thomason, E., Schultheiss, O. C., Gonzalez, R. & Volling, B. L. (2015). Individual variation in fathers’ testosterone reactivity to infant distress predicts parenting behaviors with their 1‐year‐old infants. *Developmental Psychobiology*.  Kuzawa, C. W., Gettler, L. T., Huang, Y.-y. & McDade, T. W. (2010). Mothers have lower testosterone than non-mothers: Evidence from the Philippines. *Hormones and Behavior* *57*(4), 441-7.  Lahey, B. B., Michalska, K. J., Liu, C., Chen, Q., Hipwell, A. E., Chronis-Tuscano, A., Waldman, I. D. & Decety, J. (2012). Preliminary genetic imaging study of the association between estrogen receptor-α gene polymorphisms and harsh human maternal parenting. *Neuroscience Letters* *525*(1), 17-22.  Little, A. C., Burriss, R. P., Petrie, M., Jones, B. C. & Roberts, S. C. (2013). Oral contraceptive use in women changes preferences for male facial masculinity and is associated with partner facial masculinity. *Psychoneuroendocrinology* *38*(9), 1777-85.  Maner, J. K., Miller, S. L., Schmidt, N. B. & Eckel, L. A. (2010). The Endocrinology of Exclusion Rejection Elicits Motivationally Tuned Changes in Progesterone. *Psychological science*.  Mascaro, J. S., Hackett, P. D. & Rilling, J. K. (2013). Testicular volume is inversely correlated with nurturing-related brain activity in human fathers. *Proceedings of the National Academy of Sciences* *110*(39), 15746-51.  Musser, E. D., Kaiser-Laurent, H. & Ablow, J. C. (2012). The neural correlates of maternal sensitivity: an fMRI study. *Developmental cognitive neuroscience* *2*(4), 428-36.  Naber, F., van Ijzendoorn, M. H., Deschamps, P., van Engeland, H. & Bakermans-Kranenburg, M. J. (2010). Intranasal oxytocin increases fathers' observed responsiveness during play with their children: A double-blind within-subject experiment. *Psychoneuroendocrinology*.  Nielsen, S. E., Segal, S. K., Worden, I. V., Yim, I. S. & Cahill, L. (2013). Hormonal contraception use alters stress responses and emotional memory. *Biological Psychology* *92*(2), 257-66.  Olsson, A., Kopsida, E., Sorjonen, K. & Savic, I. (2016). Testosterone and Estrogen Impact Social Evaluations and Vicarious Emotions: A Double-Blind Placebo-Controlled Study.  Riem, M. M., Bakermans-Kranenburg, M. J., Pieper, S., Tops, M., Boksem, M. A., Vermeiren, R. R., van Ijzendoorn, M. H. & Rombouts, S. A. (2011a). Oxytocin modulates amygdala, insula, and inferior frontal gyrus responses to infant crying: a randomized controlled trial. *Biological Psychiatry* *70*(3), 291-7.  Riem, M. M., van Ijzendoorn, M. H., Tops, M., Boksem, M. A., Rombouts, S. A. & Bakermans-Kranenburg, M. J. (2011b). No Laughing Matter: Intranasal Oxytocin Administration Changes Functional Brain Connectivity during Exposure to Infant Laughter. *Neuropsychopharmacology*.  Rilling, J. K., DeMarco, A. C., Hackett, P. D., Chen, X., Gautam, P., Stair, S., Haroon, E., Thompson, R., Ditzen, B. & Patel, R. (2014). Sex differences in the neural and behavioral response to intranasal oxytocin and vasopressin during human social interaction. *Psychoneuroendocrinology* *39*, 237-48.  Shahrestani, S., Kemp, A. H. & Guastella, A. J. (2013). The impact of a single administration of intranasal oxytocin on the recognition of basic emotions in humans: a meta-analysis. *Neuropsychopharmacology* *38*(10), 1929-36.  Stallings, J., Fleming, A. S., Corter, C., Worthman, C. & Steiner, M. (2001). The Effects of Infant Cries and Odors on Sympathy, Cortisol, and Autonomic Responses in New Mothers and Nonpostpartum Women. *Parenting* *1*(1-2), 71-100.  Strathearn, L., Fonagy, P., Amico, J. & Montague, P. R. (2009). Adult attachment predicts maternal brain and oxytocin response to infant cues. *Neuropsychopharmacology* *34*(13), 2655-66.  Tabak, B. A., Meyer, M. L., Castle, E., Dutcher, J. M., Irwin, M. R., Han, J. H., Lieberman, M. D. & Eisenberger, N. I. (2015). Vasopressin, but not oxytocin, increases empathic concern among individuals who received higher levels of paternal warmth: A randomized controlled trial. *Psychoneuroendocrinology* *51*, 253-61.  Thompson, R. R., George, K., Walton, J. C., Orr, S. P. & Benson, J. (2006). Sex-specific influences of vasopressin on human social communication. *Proceedings of the National Academy of Sciences of the United States of America* *103*(20), 7889-94.  van Anders, S. M., Tolman, R. M. & Volling, B. L. (2011). Baby cries and nurturance affect testosterone in men. *Hormones and Behavior*.  van Honk, J., Schutter, D. J., Bos, P. A., Kruijt, A.-W., Lentjes, E. G. & Baron-Cohen, S. (2011). Testosterone administration impairs cognitive empathy in women depending on second-to-fourth digit ratio. *Proceedings of the National Academy of Sciences of the United States of America* *108*(8), 3448-52.  Van IJzendoorn, M. H. & Bakermans-Kranenburg, M. J. (2012). A sniff of trust: meta-analysis of the effects of intranasal oxytocin administration on face recognition, trust to in-group, and trust to out-group. *Psychoneuroendocrinology* *37*(3), 438-43.  van Wingen, G. A., Mattern, C., Verkes, R. J., Buitelaar, J. & Fernandez, G. (2010). Testosterone reduces amygdala-orbitofrontal cortex coupling. *Psychoneuroendocrinology* *35*(1), 105-13.  Weisman, O., Zagoory-Sharon, O. & Feldman, R. (2012). Oxytocin administration to parent enhances infant physiological and behavioral readiness for social engagement. *Biological Psychiatry* *72*(12), 982-9.  Wingenfeld, K., Kuehl, L. K., Janke, K., Hinkelmann, K., Dziobek, I., Fleischer, J., Otte, C. & Roepke, S. (2014). Enhanced emotional empathy after mineralocorticoid receptor stimulation in women with borderline personality disorder and healthy women. *Neuropsychopharmacology* *39*(8), 1799-804.  Wirth, M. M. & Schultheiss, O. C. (2006). Effects of affiliation arousal (hope of closeness) and affiliation stress (fear of rejection) on progesterone and cortisol. *Hormones and Behavior* *50*(5), 786-95.  Zilioli, S., Ponzi, D., Henry, A., Kubicki, K., Nickels, N., Wilson, M. C. & Maestripieri, D. (2016). Interest in Babies Negatively Predicts Testosterone Responses to Sexual Visual Stimuli Among Heterosexual Young Men. *Psychological science* *27*(1), 114-8. | |
| **Section 3: Causes of endocrine variability** | |
|  | ***Animal studies*** |
| Balthazart, J., Taziaux, M., Holloway, K., Ball, G. F. & Cornil, C. A. (2009). Behavioral effects of brain-derived estrogens in birds. *Annals of the New York Academy of Sciences* *1163*, 31-48.  Biegon, A., Kim, S. W., Alexoff, D. L., Jayne, M., Carter, P., Hubbard, B., King, P., Logan, J., Muench, L., Pareto, D., Schlyer, D., Shea, C., Telang, F., Wang, G. J., Xu, Y. & Fowler, J. S. (2010). Unique distribution of aromatase in the human brain: in vivo studies with PET and [N-methyl-11C]vorozole. *Synapse* *64*(11), 801-7.  Chamberlain, N. L., Driver, E. D. & Miesfeld, R. L. (1994). The length and location of CAG trinucleotide repeats in the androgen receptor N-terminal domain affect transactivation function. *Nucleic Acids Research* *22*(15), 3181-6.  Curley, J., Jensen, C., Mashoodh, R. & Champagne, F. (2011). Social influences on neurobiology and behavior: epigenetic effects during development. *Psychoneuroendocrinology* *36*(3), 352-71.  Curley, J. P. (2011). The mu-opioid receptor and the evolution of mother-infant attachment: theoretical comment on Higham et al. (2011). *Behavioral Neuroscience* *125*(2), 273-8.  Gapp, K., Jawaid, A., Sarkies, P., Bohacek, J., Pelczar, P., Prados, J., Farinelli, L., Miska, E. & Mansuy, I. M. (2014). Implication of sperm RNAs in transgenerational inheritance of the effects of early trauma in mice. *Nature Neuroscience* *17*(5), 667-9.  Jacobson, L. & Sapolsky, R. (1991). The role of the hippocampus in feedback regulation of the hypothalamic-pituitary-adrenocortical axis. *Endocrine Reviews* *12*(2), 118-34.  Kaiser, S., Kruijver, F. P., Swaab, D. F. & Sachser, N. (2003). Early social stress in female guinea pigs induces a masculinization of adult behavior and corresponding changes in brain and neuroendocrine function. *Behavioural Brain Research* *144*(1), 199-210.  Kendrick, K. M. (2000). Oxytocin, motherhood and bonding. *Experimental Physiology* *85 Spec No*, 111S-24S.  Landgraf, R. & Neumann, I. D. (2004). Vasopressin and oxytocin release within the brain: a dynamic concept of multiple and variable modes of neuropeptide communication. *Frontiers in Neuroendocrinology* *25*(3-4), 150-76.  Lee, P. R., Brady, D. L., Shapiro, R. A., Dorsa, D. M. & Koenig, J. I. (2007). Prenatal stress generates deficits in rat social behavior: Reversal by oxytocin. *Brain Research* *1156*, 152-67.  Meaney, M. (2001). Maternal care, gene expression, and the transmission of individual differences in stress reactivity across generations. *Annual Review of Neuroscience* *24*, 1161-253.  Oitzl, M. S., Champagne, D. L., van der Veen, R. & de Kloet, E. R. (2010). Brain development under stress: hypotheses of glucocorticoid actions revisited. *Neuroscience and Biobehavioral Reviews* *34*(6), 853-66.  Sachser, N. (2005). Adult social bonding: Insights from studies in nonhuman animals. In C.S. carter, L. Ahnert, K.E. Grossmann, S.B. Hrdy, M.E. Lamb, S.W. Porges & N. Sachser (Eds.), *Attachment and bonding: A new synthesis* (pp. 119-35). Cambridge, Massachusetts: The MIT Press.  Sachser, N., Kaiser, S. & Hennessy, M. B. (2013). Behavioural profiles are shaped by social experience: when, how and why. *Philosophical Transactions of the Royal Society of London B: Biological Sciences* *368*(1618), 20120344.  Sarachana, T., Xu, M., Wu, R. C. & Hu, V. W. (2011). Sex hormones in autism: androgens and estrogens differentially and reciprocally regulate RORA, a novel candidate gene for autism. *PLoS One* *6*(2), e17116. | |
|  | ***Human studies*** |
| Andersen, S. & Teicher, M. (2009). Desperately driven and no brakes: developmental stress exposure and subsequent risk for substance abuse. *Neuroscience and Biobehavioral Reviews* *33*(4), 516-24.  Apter-Levy, Y., Feldman, M., Vakart, A., Ebstein, R. P. & Feldman, R. (2013). Impact of maternal depression across the first 6 years of life on the child’s mental health, social engagement, and empathy: the moderating role of oxytocin. *American Journal of Psychiatry* *170*(10), 1161-8.  Auyeung, B., Baron-Cohen, S., Ashwin, E., Knickmeyer, R., Taylor, K., Hackett, G. & Hines, M. (2009). Fetal testosterone predicts sexually differentiated childhood behavior in girls and in boys. *Psychological science* *20*(2), 144-8.  Baibazarova, E., van de Beek, C., Cohen-Kettenis, P. T., Buitelaar, J., Shelton, K. H. & van Goozen, S. H. (2013). Influence of prenatal maternal stress, maternal plasma cortisol and cortisol in the amniotic fluid on birth outcomes and child temperament at 3 months. *Psychoneuroendocrinology* *38*(6), 907-15.  Bakermans-Kranenburg, M. & Van Ijzendoorn, M. (2013). Sniffing around oxytocin: review and meta-analyses of trials in healthy and clinical groups with implications for pharmacotherapy. *Translational psychiatry* *3*(5), e258.  Bakermans-Kranenburg, M., van Ijzendoorn, M., Riem, M., Tops, M. & Alink, L. (2012). Oxytocin decreases handgrip force in reaction to infant crying in females without harsh parenting experiences. *Social cognitive and affective neuroscience* *7*(8), 951-7.  Bakermans-Kranenburg, M. J. & van IJzendoorn, M. H. (2008). Oxytocin receptor (OXTR) and serotonin transporter (5-HTT) genes associated with observed parenting. *Social cognitive and affective neuroscience* *3*(2), 128-34.  Bakermans-Kranenburg, M. J. & van IJzendoorn, M. H. (2014). A sociability gene? Meta-analysis of oxytocin receptor genotype effects in humans. *Psychiatric genetics* *24*(2), 45-51.  Baron-Cohen, S., Auyeung, B., Nørgaard-Pedersen, B., Hougaard, D., Abdallah, M., Melgaard, L., Cohen, A., Chakrabarti, B., Ruta, L. & Lombardo, M. (2015). Elevated fetal steroidogenic activity in autism. *Molecular Psychiatry* *20*(3), 369-76.  Bartz, J. A., Simeon, D., Hamilton, H., Kim, S., Crystal, S., Braun, A., Vicens, V. & Hollander, E. (2011a). Oxytocin can hinder trust and cooperation in borderline personality disorder. *Soc Cogn Affect Neurosci* *6*(5), 556-63.  Bartz, J. A., Zaki, J., Bolger, N. & Ochsner, K. N. (2011b). Social effects of oxytocin in humans: context and person matter. *Trends in Cognitive Science* *15*(7), 301-9.  Bartz, J. A., Zaki, J., Ochsner, K. N., Bolger, N., Kolevzon, A., Ludwig, N. & Lydon, J. E. (2010). Effects of oxytocin on recollections of maternal care and closeness. *Proceedings of the National Academy of Sciences* *107*(50), 21371-5.  Belsky, J. (2005). The developmental and evolutionary psychology of intergenerational transmission of attachment. In C.S. carter, L. Ahnert, K.E. Grossmann, S.B. Hrdy, M.E. Lamb, S.W. Porges & N. Sachser (Eds.), *Attachment and bonding: A new synthesis* (pp. 169-98). Cambridge, Massachusetts: The MIT Press.  Ben-Ari, Y. (2015). Is birth a critical period in the pathogenesis of autism spectrum disorders? *Nature Reviews Neuroscience*.  Bhandari, R., Bakermans-Kranenburg, M. J., van der Veen, R., Parsons, C. E., Young, K. S., Grewen, K. M., Stein, A., Kringelbach, M. L. & van IJzendoorn, M. H. (2014a). Salivary oxytocin mediates the association between emotional maltreatment and responses to emotional infant faces. *Physiology & behavior* *131*, 123-8.  Bhandari, R., van der Veen, R., Parsons, C. E., Young, K. S., Voorthuis, A., Bakermans-Kranenburg, M. J., Stein, A., Kringelbach, M. L. & van IJzendoorn, M. H. (2014b). Effects of intranasal oxytocin administration on memory for infant cues: Moderation by childhood emotional maltreatment. *Social neuroscience* *9*(5), 536-47.  Blanchard, A., Lyons, M. & Nelson, E. (2014). What is past is prologue: Pre-natal testosterone and parental bonding predicts adult attachment styles. *Personality and Individual Differences* *60*, S47.  Blustein, J. & Liu, J. (2015). Time to consider the risks of caesarean delivery for long term child health. *BMJ* *350*, h2410.  Bos, P. A., Montoya, E. R., Hermans, E. J., Keysers, C. & van Honk, J. (2015). Oxytocin reduces neural activity in the pain circuitry when seeing pain in others. *NeuroImage* *113*, 217-24.  Bos, P. A., Montoya, E. R., Terburg, D. & van Honk, J. (2014). Cortisol administration increases hippocampal activation to infant crying in males depending on childhood neglect. *Human Brain Mapping* *35*(10), 5116-26.  Burghy, C., Stodola, D., Ruttle, P., Molloy, E., Armstrong, J., Oler, J., Fox, M., Hayes, A., Kalin, N., Essex, M., Davidson, R. & Birn, R. (2012). Developmental pathways to amygdala-prefrontal function and internalizing symptoms in adolescence. *Nature Neuroscience*.  Bystrova, K., Ivanova, V., Edhborg, M., Matthiesen, A. S., Ransjö‐Arvidson, A. B., Mukhamedrakhimov, R., Uvnäs‐Moberg, K. & Widström, A. M. (2009). Early contact versus separation: effects on mother–infant interaction one year later. *Birth* *36*(2), 97-109.  Cecil, C., Lysenko, L., Jaffee, S., Pingault, J., Smith, R., Relton, C., Woodward, G., McArdle, W., Mill, J. & Barker, E. (2014). Environmental risk, Oxytocin Receptor Gene (OXTR) methylation and youth callous-unemotional traits: a 13-year longitudinal study. *Molecular Psychiatry*.  Chabris, C., Hebert, B., Benjamin, D., Beauchamp, J., Cesarini, D., van der Loos, M., Johannesson, M., Magnusson, P., Lichtenstein, P., Atwood, C., Freese, J., Hauser, T., Hauser, R., Christakis, N. & Laibson, D. (2012). Most reported genetic associations with general intelligence are probably false positives. *Psychological science* *23*(11), 1314-23.  Chen, F., Kumsta, R., Dvorak, F., Domes, G., Yim, O., Ebstein, R. & Heinrichs, M. (2015). Genetic modulation of oxytocin sensitivity: a pharmacogenetic approach. *Translational psychiatry* *5*(10), e664.  Clark, C. L., John, N. S., Pasca, A. M., Hyde, S. A., Hornbeak, K., Abramova, M., Feldman, H., Parker, K. J. & Penn, A. A. (2013). Neonatal CSF oxytocin levels are associated with parent report of infant soothability and sociability. *Psychoneuroendocrinology* *38*(7), 1208-12.  Dannlowski, U., Kugel, H., Grotegerd, D., Redlich, R., Opel, N., Dohm, K., Zaremba, D., Grögler, A., Schwieren, J. & Suslow, T. (2015). Disadvantage of social sensitivity: Interaction of oxytocin receptor genotype and child maltreatment on brain structure. *Biological Psychiatry*.  De Dreu, C. K. (2012). Oxytocin modulates the link between adult attachment and cooperation through reduced betrayal aversion. *Psychoneuroendocrinology* *37*(7), 871-80.  de Macks, Z. A. O., Moor, B. G., Overgaauw, S., Güroğlu, B., Dahl, R. E. & Crone, E. A. (2011). Testosterone levels correspond with increased ventral striatum activation in response to monetary rewards in adolescents. *Developmental cognitive neuroscience* *1*(4), 506-16.  Dobrova-Krol, N. A., van IJzendoorn, M. H., Bakermans-Kranenburg, M. J., Cyr, C. & Juffer, F. (2008). Physical growth delays and stress dysregulation in stunted and non-stunted Ukrainian institution-reared children. *Infant Behavior and Development* *31*(3), 539-53.  Ebert, A., Kolb, M., Heller, J., Edel, M.-A., Roser, P. & Brüne, M. (2013). Modulation of interpersonal trust in borderline personality disorder by intranasal oxytocin and childhood trauma. *Social neuroscience* *8*(4), 305-13.  Ehrhardt, A. A. & Meyer-Bahlburg, H. F. (1981). Effects of prenatal sex hormones on gender-related behavior. *Science* *211*(4488), 1312-8.  Ellis, B. J. (2004). Timing of pubertal maturation in girls: an integrated life history approach. *Psychological Bulletin* *130*(6), 920.  Elzinga, B. M., Roelofs, K., Tollenaar, M. S., Bakvis, P., van Pelt, J. & Spinhoven, P. (2008). Diminished cortisol responses to psychosocial stress associated with lifetime adverse events: a study among healthy young subjects. *Psychoneuroendocrinology* *33*(2), 227-37.  Elzinga, B. M., Spinhoven, P., Berretty, E., de Jong, P. & Roelofs, K. (2010). The role of childhood abuse in HPA-axis reactivity in Social Anxiety Disorder: A pilot study. *Biological Psychology* *83*(1), 1-6.  Fan, Y., Herrera‐Melendez, A. L., Pestke, K., Feeser, M., Aust, S., Otte, C., Pruessner, J. C., Böker, H., Bajbouj, M. & Grimm, S. (2014). Early life stress modulates amygdala‐prefrontal functional connectivity: Implications for oxytocin effects. *Human Brain Mapping* *35*(10), 5328-39.  Fan, Y., Pestke, K., Feeser, M., Aust, S., Pruessner, J. C., Böker, H., Bajbouj, M. & Grimm, S. (2015). Amygdala–Hippocampal Connectivity Changes During Acute Psychosocial Stress: Joint Effect of Early Life Stress and Oxytocin. *Neuropsychopharmacology*.  Fang, A., Hoge, E. A., Heinrichs, M. & Hofmann, S. G. (2014). Attachment Style Moderates the Effects of Oxytocin on Social Behaviors and Cognitions During Social Rejection Applying a Research Domain Criteria Framework to Social Anxiety. *Clinical Psychological Science*, 2167702614527948.  Feeser, M., Fan, Y., Weigand, A., Hahn, A., Gärtner, M., Aust, S., Böker, H., Bajbouj, M. & Grimm, S. (2014). The beneficial effect of oxytocin on avoidance-related facial emotion recognition depends on early life stress experience. *Psychopharmacology* *231*(24), 4735-44.  Feldman, R., Weller, A., Zagoory-Sharon, O. & Levine, A. (2007). Evidence for a neuroendocrinological foundation of human affiliation: plasma oxytocin levels across pregnancy and the postpartum period predict mother-infant bonding. *Psychol Sci* *18*(11), 965-70.  Fleming, A. S., Corter, C., Stallings, J. & Steiner, M. (2002). Testosterone and prolactin are associated with emotional responses to infant cries in new fathers. *Hormones and Behavior* *42*(4), 399-413.  Fleming, A. S., Ruble, D., Krieger, H. & Wong, P. Y. (1997a). Hormonal and experiential correlates of maternal responsiveness during pregnancy and the puerperium in human mothers. *Hormones and Behavior* *31*(2), 145-58.  Fleming, A. S., Steiner, M. & Corter, C. (1997b). Cortisol, hedonics, and maternal responsiveness in human mothers. *Hormones and Behavior* *32*(2), 85-98.  Fries, A. B., Ziegler, T. E., Kurian, J. R., Jacoris, S. & Pollak, S. D. (2005). Early experience in humans is associated with changes in neuropeptides critical for regulating social behavior. *Proceedings of the National Academy of Sciences of the United States of America* *102*(47), 17237-40.  Gonzalez, A., Jenkins, J. M., Steiner, M. & Fleming, A. S. (2012). Maternal early life experiences and parenting: the mediating role of cortisol and executive function. *Journal of the American Academy of Child & Adolescent Psychiatry* *51*(7), 673-82.  Gregory, S. G., Connelly, J. J., Towers, A. J., Johnson, J., Biscocho, D., Markunas, C. A., Lintas, C., Abramson, R. K., Wright, H. H. & Ellis, P. (2009). Genomic and epigenetic evidence for oxytocin receptor deficiency in autism. *BMC medicine* *7*(1), 62.  Grimm, S., Pestke, K., Feeser, M., Aust, S., Weigand, A., Wang, J., Wingenfeld, K., Pruessner, J. C., La Marca, R., Boker, H. & Bajbouj, M. (2014). Early life stress modulates oxytocin effects on limbic system during acute psychosocial stress. *Social cognitive and affective neuroscience*.  Gunnar, M. R., Morison, S. J., Chisholm, K. & Schuder, M. (2001). Salivary cortisol levels in children adopted from Romanian orphanages. *Development and Psychopathology* *13*(03), 611-28.  Gunnar, M. R. & Vazquez, D. M. (2001). Low cortisol and a flattening of expected daytime rhythm: Potential indices of risk in human development. *Development and Psychopathology* *13*(03), 515-38.  Heim, C. & Nemeroff, C. (2001). The role of childhood trauma in the neurobiology of mood and anxiety disorders: preclinical and clinical studies. *Biological Psychiatry* *49*(12), 1023-39.  Heim, C., Newport, D. J., Mletzko, T., Miller, A. H. & Nemeroff, C. B. (2008). The link between childhood trauma and depression: insights from HPA axis studies in humans. *Psychoneuroendocrinology* *33*(6), 693-710.  Heim, C., Young, L. J., Newport, D. J., Mletzko, T., Miller, A. H. & Nemeroff, C. B. (2009). Lower CSF oxytocin concentrations in women with a history of childhood abuse. *Molecular Psychiatry* *14*(10), 954-8.  Hinkelmann, K., Muhtz, C., Dettenborn, L., Agorastos, A., Wingenfeld, K., Spitzer, C., Gao, W., Kirschbaum, C., Wiedemann, K. & Otte, C. (2013). Association Between Childhood Trauma and Low Hair Cortisol in Depressed Patients and Healthy Control Subjects. *Biological Psychiatry* *doi: 10.10*.  Hompes, T., Izzi, B., Gellens, E., Morreels, M., Fieuws, S., Pexsters, A., Schops, G., Dom, M., Van Bree, R. & Freson, K. (2013). Investigating the influence of maternal cortisol and emotional state during pregnancy on the DNA methylation status of the glucocorticoid receptor gene (NR3C1) promoter region in cord blood. *Journal of Psychiatric Research* *47*(7), 880-91.  Huffmeijer, R., Alink, L. R., Tops, M., Grewen, K. M., Light, K. C., Bakermans-Kranenburg, M. J. & van IJzendoorn, M. H. (2013). The impact of oxytocin administration and maternal love withdrawal on event-related potential (ERP) responses to emotional faces with performance feedback. *Hormones and Behavior* *63*(3), 399-410.  Hurd, P. L., Vaillancourt, K. L. & Dinsdale, N. L. (2011). Aggression, digit ratio and variation in androgen receptor and monoamine oxidase A genes in men. *Behavior Genetics* *41*(4), 543-56.  Jaffee, S. R., McFarquhar, T., Stevens, S., Ouellet‐Morin, I., Melhuish, E. & Belsky, J. (2015). Interactive effects of early and recent exposure to stressful contexts on cortisol reactivity in middle childhood. *Journal of Child Psychology and Psychiatry* *56*(2), 138-46.  Jones, J. D., Cassidy, J. & Shaver, P. R. (2014). Parents’ Self-Reported Attachment Styles A Review of Links with Parenting Behaviors, Emotions, and Cognitions. *Personality and Social Psychology Review*, 1088868314541858.  Klengel, T., Mehta, D., Anacker, C., Rex-Haffner, M., Pruessner, J. C., Pariante, C. M., Pace, T. W., Mercer, K. B., Mayberg, H. S. & Bradley, B. (2013). Allele-specific FKBP5 DNA demethylation mediates gene-childhood trauma interactions. *Nature Neuroscience* *16*(1), 33-41.  Leveroni, C. L. & Berenbaum, S. A. (1998). Early androgen effects on interest in infants: evidence from children with congenital adrenal hyperplasia. *Developmental Neuropsychology* *14*(2-3), 321-40.  Liberzon, I., Taylor, S. F., Phan, K. L., Britton, J. C., Fig, L. M., Bueller, J. A., Koeppe, R. A. & Zubieta, J.-K. (2007). Altered central μ-opioid receptor binding after psychological trauma. *Biological Psychiatry* *61*(9), 1030-8.  Lombardo, M. V., Ashwin, E., Auyeung, B., Chakrabarti, B., Lai, M.-C., Taylor, K., Hackett, G., Bullmore, E. T. & Baron-Cohen, S. (2012a). Fetal programming effects of testosterone on the reward system and behavioral approach tendencies in humans. *Biological Psychiatry* *72*(10), 839-47.  Lombardo, M. V., Ashwin, E., Auyeung, B., Chakrabarti, B., Taylor, K., Hackett, G., Bullmore, E. T. & Baron-Cohen, S. (2012b). Fetal Testosterone Influences Sexually Dimorphic Gray Matter in the Human Brain. *Journal of Neuroscience* *32*(2), 674-80.  Lovallo, W. R. (2013). Early life adversity reduces stress reactivity and enhances impulsive behavior: Implications for health behaviors. *International Journal of Psychophysiology* *90*(1), 8-16.  Luo, S., Li, B., Ma, Y., Zhang, W., Rao, Y. & Han, S. (2015). Oxytocin receptor gene and racial ingroup bias in empathy-related brain activity. *NeuroImage* *110*, 22-31.  Manuck, S. B., Marsland, A. L., Flory, J. D., Gorka, A., Ferrell, R. E. & Hariri, A. R. (2010). Salivary testosterone and a trinucleotide (CAG) length polymorphism in the androgen receptor gene predict amygdala reactivity in men. *Psychoneuroendocrinology* *35*(1), 94-104.  Marsh, A. A., Henry, H. Y., Pine, D. S., Gorodetsky, E. K., Goldman, D. & Blair, R. (2012). The influence of oxytocin administration on responses to infant faces and potential moderation by OXTR genotype. *Psychopharmacology* *224*(4), 469-76.  Martin, C. G., Kim, H. K. & Fisher, P. A. (2016). Differential sensitization of parenting on early adolescent cortisol: Moderation by profiles of maternal stress. *Psychoneuroendocrinology* *67*, 18-26.  Mascaro, J. S., Hackett, P. D., Gouzoules, H., Lori, A. & Rilling, J. K. (2014). Behavioral and genetic correlates of the neural response to infant crying among human fathers. *Social cognitive and affective neuroscience* *9*(11), 1704-12.  McGowan, P. O., Sasaki, A., D'Alessio, A. C., Dymov, S., Labonté, B., Szyf, M., Turecki, G. & Meaney, M. J. (2009). Epigenetic regulation of the glucocorticoid receptor in human brain associates with childhood abuse. *Nature Neuroscience* *12*(3), 342-8.  Meinlschmidt, G. & Heim, C. (2007). Sensitivity to intranasal oxytocin in adult men with early parental separation. *Biological Psychiatry* *61*(9), 1109-11.  Michalska, K. J., Decety, J., Liu, C., Chen, Q., Martz, M. E., Jacob, S., Hipwell, A. E., Lee, S. S., Chronis-Tuscano, A. & Waldman, I. D. (2014). Genetic imaging of the association of oxytocin receptor gene (OXTR) polymorphisms with positive maternal parenting. *Frontiers in Behavioral Neuroscience* *8*.  Milner, J. (2003). Social information processing in high-risk and physically abusive parents. *Child Abuse and Neglect* *27*(1), 7-20.  Montag, C., Sauer, C., Reuter, M. & Kirsch, P. (2013). An interaction between oxytocin and a genetic variation of the oxytocin receptor modulates amygdala activity toward direct gaze: evidence from a pharmacological imaging genetics study. *European archives of psychiatry and clinical neuroscience* *263*(2), 169-75.  Nummenmaa, L., Manninen, S., Tuominen, L., Hirvonen, J., Kalliokoski, K. K., Nuutila, P., Jääskeläinen, I. P., Hari, R., Dunbar, R. I. & Sams, M. (2015). Adult attachment style is associated with cerebral μ‐opioid receptor availability in humans. *Human Brain Mapping*.  Opel, N., Redlich, R., Zwanzger, P., Grotegerd, D., Arolt, V., Heindel, W., Konrad, C., Kugel, H. & Dannlowski, U. (2014). Hippocampal Atrophy in Major Depression: a Function of Childhood Maltreatment Rather than Diagnosis&quest. *Neuropsychopharmacology* *39*(12), 2723-31.  Out, D., Pieper, S., Bakermans-Kranenburg, M. J., Zeskind, P. S. & van IJzendoorn, M. H. (2010). Intended sensitive and harsh caregiving responses to infant crying: the role of cry pitch and perceived urgency in an adult twin sample. *Child abuse & neglect* *34*(11), 863-73.  Peltola, M. J., Yrttiaho, S., Puura, K., Proverbio, A. M., Mononen, N., Lehtimäki, T. & Leppänen, J. M. (2014). Motherhood and oxytocin receptor genetic variation are associated with selective changes in electrocortical responses to infant facial expressions. *Emotion* *14*(3), 469.  Peper, J., Pol, H. H., Crone, E. & Van Honk, J. (2011). Sex steroids and brain structure in pubertal boys and girls: a mini-review of neuroimaging studies. *Neuroscience* *191*, 28-37.  Peper, J. S., de Reus, M. A., van den Heuvel, M. P. & Schutter, D. J. (2015). Short fused? associations between white matter connections, sex steroids, and aggression across adolescence. *Human Brain Mapping* *36*(3), 1043-52.  Peper, J. S., Koolschijn, P. C. M. & Crone, E. A. (2013a). Development of risk taking: contributions from adolescent testosterone and the orbito-frontal cortex. *Journal of Cognitive Neuroscience* *25*(12), 2141-50.  Peper, J. S., Mandl, R. C. W., Braams, B. R., de Water, E., Heijboer, A. C., Koolschijn, P. C. M. P. & Crone, E. A. (2013b). Delay discounting and frontostriatal fiber tracts: a combined DTI and MTR study on impulsive choices in healthy young adults. *Cerebral cortex (New York, N.Y. : 1991)* *23*(7), 1695-702.  Pierrehumbert, B., Torrisi, R., Ansermet, F., Borghini, A. & Halfon, O. (2012). Adult attachment representations predict cortisol and oxytocin responses to stress. *Attachment & human development* *14*(5), 453-76.  Pierrehumbert, B., Torrisi, R., Laufer, D., Halfon, O., Ansermet, F. & Popovic, M. B. (2010). Oxytocin response to an experimental psychosocial challenge in adults exposed to traumatic experiences during childhood or adolescence. *Neuroscience* *166*(1), 168-77.  Puglia, M. H., Lillard, T. S., Morris, J. P. & Connelly, J. J. (2015). Epigenetic modification of the oxytocin receptor gene influences the perception of anger and fear in the human brain. *Proceedings of the National Academy of Sciences* *112*(11), 3308-13.  Reiner, I., Van IJzendoorn, M., Bakermans-Kranenburg, M., Bleich, S., Beutel, M. & Frieling, H. (2015). Methylation of the oxytocin receptor gene in clinically depressed patients compared to controls: The role of OXTR rs53576 genotype. *Journal of Psychiatric Research* *65*, 9-15.  Riem, M. M., Bakermans-Kranenburg, M. J., Huffmeijer, R. & van IJzendoorn, M. H. (2013a). Does intranasal oxytocin promote prosocial behavior to an excluded fellow player? A randomized-controlled trial with Cyberball. *Psychoneuroendocrinology* *38*(8), 1418-25.  Riem, M. M., van Ijzendoorn, M. H., Tops, M., Boksem, M. A., Rombouts, S. A. & Bakermans-Kranenburg, M. J. (2013b). Oxytocin effects on complex brain networks are moderated by experiences of maternal love withdrawal. *European Neuropsychopharmacology* *23*(10), 1288-95.  Rilling, J. K. (2013). The neural and hormonal bases of human parental care. *Neuropsychologia* *51*(4), 731-47.  Roisman, G. I., Holland, A., Fortuna, K., Fraley, R. C., Clausell, E. & Clarke, A. (2007). The Adult Attachment Interview and self-reports of attachment style: an empirical rapprochement. *Journal of Personality and Social Psychology* *92*(4), 678.  Roney, J. R., Simmons, Z. L. & Lukaszewski, A. W. (2010). Androgen receptor gene sequence and basal cortisol concentrations predict men's hormonal responses to potential mates. *Proceedings of the Royal Society of London B: Biological Sciences* *277*(1678), 57-63.  Ruttle, P. L., Shirtcliff, E. A., Armstrong, J. M., Klein, M. H. & Essex, M. J. (2015). Neuroendocrine coupling across adolescence and the longitudinal influence of early life stress. *Developmental Psychobiology* *57*(6), 688-704.  Schechter, D. S., Moser, D. A., Paoloni-Giacobino, A., Stenz, L., Gex-Fabry, M., Aue, T., Adouan, W., Cordero, M. I., Suardi, F. & Manini, A. (2015). Methylation of NR3C1 is related to maternal PTSD, parenting stress and maternal medial prefrontal cortical activity in response to child separation among mothers with histories of violence exposure. *Frontiers in psychology* *6*.  Seltzer, L. J., Ziegler, T., Connolly, M. J., Prososki, A. R. & Pollak, S. D. (2014). Stress‐Induced Elevation of Oxytocin in Maltreated Children: Evolution, Neurodevelopment, and Social Behavior. *Child development* *85*(2), 501-12.  Sewell, J. E. (1993). Cesarean section-a brief history. *A brochure to accompany an exhibition on the history of cesarean section at the National Library of Medicine* *30*.  Simmons, Z. L. & Roney, J. R. (2011). Variation in CAG repeat length of the androgen receptor gene predicts variables associated with intrasexual competitiveness in human males. *Hormones and Behavior* *60*(3), 306-12.  Skrundz, M., Bolten, M., Nast, I., Hellhammer, D. H. & Meinlschmidt, G. (2011). Plasma oxytocin concentration during pregnancy is associated with development of postpartum depression. *Neuropsychopharmacology* *36*(9), 1886-93.  Sripada, C., Phan, K., Labuschagne, I., Welsh, R., Nathan, P. & Wood, A. (2012). Oxytocin enhances resting-state connectivity between amygdala and medial frontal cortex. *The international journal of neuropsychopharmacology / official scientific journal of the Collegium Internationale Neuropsychopharmacologicum (CINP)*, 1-6.  Stallings, J., Fleming, A. S., Corter, C., Worthman, C. & Steiner, M. (2001). The Effects of Infant Cries and Odors on Sympathy, Cortisol, and Autonomic Responses in New Mothers and Nonpostpartum Women. *Parenting* *1*(1-2), 71-100.  Strathearn, L., Fonagy, P., Amico, J. & Montague, P. R. (2009). Adult attachment predicts maternal brain and oxytocin response to infant cues. *Neuropsychopharmacology* *34*(13), 2655-66.  Swain, J. E., Tasgin, E., Mayes, L. C., Feldman, R., Constable, R. T. & Leckman, J. F. (2008). Maternal brain response to own baby-cry is affected by cesarean section delivery. *Journal of Child Psychology and Psychiatry and Allied Disciplines* *49*(10), 1042-52.  Tharner, A., Luijk, M. P., Raat, H., IJzendoorn, M. H., Bakermans-Kranenburg, M. J., Moll, H. A., Jaddoe, V. W., Hofman, A., Verhulst, F. C. & Tiemeier, H. (2012). Breastfeeding and its relation to maternal sensitivity and infant attachment. *Journal of Developmental & Behavioral Pediatrics* *33*(5), 396-404.  Trickett, P. K., Gordis, E., Peckins, M. K. & Susman, E. J. (2014). Stress reactivity in maltreated and comparison male and female young adolescents. *Child Maltreatment*, 1077559513520466.  Troisi, A., Frazzetto, G., Carola, V., Di Lorenzo, G., Coviello, M., Siracusano, A. & Gross, C. (2012). Variation in the μ-opioid receptor gene (OPRM1) moderates the influence of early maternal care on fearful attachment. *Social cognitive and affective neuroscience* *7*(5), 542-7.  Tyrka, A., Wier, L., Price, L., Ross, N., Anderson, G., Wilkinson, C. & Carpenter, L. (2008). Childhood parental loss and adult hypothalamic-pituitary-adrenal function. *Biological Psychiatry* *63*(12), 1147-54.  Tyrka, A. R., Price, L. H., Marsit, C., Walters, O. C. & Carpenter, L. L. (2012). Childhood adversity and epigenetic modulation of the leukocyte glucocorticoid receptor: preliminary findings in healthy adults. *PLoS ONE* *7*(1), e30148.  Unternaehrer, E., Luers, P., Mill, J., Dempster, E., Meyer, A., Staehli, S., Lieb, R., Hellhammer, D. & Meinlschmidt, G. (2012). Dynamic changes in DNA methylation of stress-associated genes (OXTR, BDNF) after acute psychosocial stress. *Translational psychiatry* *2*(8), e150.  Uzefovsky, F., Shalev, I., Israel, S., Edelman, S., Raz, Y., Mankuta, D., Knafo-Noam, A. & Ebstein, R. (2015). Oxytocin receptor and vasopressin receptor 1a genes are respectively associated with emotional and cognitive empathy. *Hormones and Behavior* *67*, 60-5.  van Honk, J., Schutter, D. J., Bos, P. A., Kruijt, A.-W., Lentjes, E. G. & Baron-Cohen, S. (2011). Testosterone administration impairs cognitive empathy in women depending on second-to-fourth digit ratio. *Proceedings of the National Academy of Sciences of the United States of America* *108*(8), 3448-52.  Van IJzendoorn, M. (1995). Adult attachment representations, parental responsiveness, and infant attachment: a meta-analysis on the predictive validity of the Adult Attachment Interview. *Psychological Bulletin* *117*(3), 387.  Van IJzendoorn, M. H. & Bakermans‐Kranenburg, M. J. (2010). Stretched until it snaps: Attachment and close relationships. *Child Development Perspectives* *4*(2), 109-11.  Van IJzendoorn, M. H., Huffmeijer, R., Alink, L. R., Bakermans-Kranenburg, M. J. & Tops, M. (2011). The impact of oxytocin administration on charitable donating is moderated by experiences of parental love-withdrawal. *Frontiers in psychology* *2*.  Varendi, H., Porter, R. H. & Winberg, J. (2002). The effect of labor on olfactory exposure learning within the first postnatal hour. *Behavioral Neuroscience* *116*(2), 206.  Vukojevic, V., Kolassa, I.-T., Fastenrath, M., Gschwind, L., Spalek, K., Milnik, A., Heck, A., Vogler, C., Wilker, S. & Demougin, P. (2014). Epigenetic modification of the glucocorticoid receptor gene is linked to traumatic memory and post-traumatic stress disorder risk in genocide survivors. *The Journal of Neuroscience* *34*(31), 10274-84.  Way, B. M., Taylor, S. E. & Eisenberger, N. I. (2009). Variation in the mu-opioid receptor gene (OPRM1) is associated with dispositional and neural sensitivity to social rejection. *Proceedings of the National Academy of Sciences of the United States of America* *106*(35), 15079-84.  Weisman, O., Agerbo, E., Carter, C. S., Harris, J. C., Uldbjerg, N., Henriksen, T. B., Thygesen, M., Mortensen, P. B., Leckman, J. F. & Dalsgaard, S. (2015a). Oxytocin-augmented labor and risk for autism in males. *Behavioural Brain Research* *284*, 207-12.  Weisman, O., Pelphrey, K. A., Leckman, J. F., Feldman, R., Lu, Y., Chong, A., Chen, Y., Monakhov, M., Chew, S. H. & Ebstein, R. P. (2015b). The association between 2D: 4D ratio and cognitive empathy is contingent on a common polymorphism in the oxytocin receptor gene (OXTR rs53576). *Psychoneuroendocrinology* *58*, 23-32.  Wingenfeld, K., Kuehl, L. K., Janke, K., Hinkelmann, K., Dziobek, I., Fleischer, J., Otte, C. & Roepke, S. (2014). Enhanced emotional empathy after mineralocorticoid receptor stimulation in women with borderline personality disorder and healthy women. *Neuropsychopharmacology* *39*(8), 1799-804. | |