

## Research Articles

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1. Scott H, Phillips TJ, Sze Y, Alfieri A, Rogers MF, Volpato V, Case CP, **Brunton PJ**<sup>†</sup> (2020) Maternal antioxidant treatment prevents the adverse effects of prenatal stress on the offspring's brain and behavior. *Neurobiol Stress* (in press). [link](#)
2. Sze Y, **Brunton PJ**<sup>†</sup> (2020) Effects of prenatal stress on neuroactive steroid responses to acute stress in adult male and female rats. *J Neuroendocrinol* (in press). [link](#)
3. Agnew EJ, Burgos AG, Richardson RV, Manos H, Thomson AJW, Sooy K, Just G, Homer NZM, Moran CM, **Brunton PJ**, Gray GA, Chapman KE (2019) Antenatal dexamethasone treatment transiently alters diastolic function in the mouse fetal heart. *J Endocrinol* 241: 279-292. [link](#)
4. Sze Y, Gill AC, **Brunton PJ**<sup>†</sup> (2018) Sex-dependent changes in neuroactive steroid concentrations in the rat brain following acute swim stress. *J Neuroendocrinol* 30: e12644. [link](#)
5. Klampfl SM, Schramm MM, Gaßner BM, Hübner K, Seasholtz AF, **Brunton PJ**, Bayerl DS, Bosch OJ (2018) Maternal stress and the MPOA: activation of CRF receptor 1 impairs maternal behavior and triggers local oxytocin release in lactating rats. *Neuropharmacology* 133: 440-450. [link](#)
6. Graham LC, Eaton SL, **Brunton PJ**, Atrih A, Smith C, Lamont DJ, Gillingwater TH, Pennetta G, Skehel P, Wishart TM (2017) Proteomic profiling of neuronal mitochondria reveals modulators of synaptic architecture. *Mol Neurodegen* 12: 77. [link](#)
7. Grundwald NJ, Benítez DP, **Brunton PJ**<sup>†</sup> (2016) Sex-dependent effects of prenatal stress on social memory in rats: A role for differential expression of central vasopressin-1a receptors. *J Neuroendocrinol* 28. [link](#)
8. Ashworth CJ, George SO, Hogg CO, Lai Y, **Brunton PJ** (2016) Sex-specific effects of prenatal stress on rat reproductive and adrenal gland development. *Reproduction* 151: 709-717. [link](#)
9. Klampfl SM, **Brunton PJ**, Bayerl DS, Bosch OJ (2016) CRF-R1 activation in the anterior-dorsal BNST induces maternal neglect in lactating rats via an HPA axis-independent central mechanism. *Psychoneuroendocrinology* 64: 89-98. [link](#)
10. Grundwald NJ, **Brunton PJ**<sup>†</sup> (2015) Prenatal stress programs neuroendocrine stress responses and affective behaviors in second generation rats in a sex-dependent manner. *Psychoneuroendocrinology* 62: 204-216. [link](#)
11. **Brunton PJ**<sup>†</sup>, Donadio MV, Yao ST, Greenwood MP, Seckl JR, Murphy D, Russell JA (2015) 5 $\alpha$ -reduced neurosteroids sex-dependently reverse central prenatal programming of neuroendocrine stress responses in rats. *J Neurosci* 35: 666-677. [link](#)
12. Klampfl SM, **Brunton PJ**, Bayerl DS, Bosch OJ (2014) Hypo-activation of CRF receptors, predominantly type 2, in the medial-posterior BNST is vital for adequate maternal behavior in lactating rats. *J Neurosci* 34: 9665-76. [link](#)
13. Rutherford KMD, Piastowska A, Donald RD, Robson SK, Ison SH, Jarvis S, **Brunton PJ**, Russell JA, Lawrence AB (2014) Prenatal stress produces anxiety prone female offspring with impaired maternal behaviour in the domestic pig. *Physiol Behav* 129: 255-264. [link](#)
14. Tobin VA, Arechaga G, **Brunton PJ**, Russell JA, Leng G, Ludwig M, Douglas AJ (2014) Oxytocinase in the female rat hypothalamus: a novel mechanism controlling oxytocin neurons during lactation. *J Neuroendocrinol* 26: 205-216. [link](#)

15. **Brunton PJ**<sup>†</sup>, Sullivan KM, Kerrigan D, Russell JA, Seckl JR, Drake AJ (2013) Sex-specific effects of prenatal stress on glucose homeostasis and peripheral metabolism in rats. *J Endocrinol* 217: 161-73. [link](#)
16. Sun L, Gooding HL, **Brunton PJ**, Russell JA, Mitchell R, Fleetwood-Walker S (2013) Phospholipase D-mediated hypersensitivity at central synapses is associated with abnormal behaviours and pain sensitivity in rats exposed to prenatal stress. *Int J Biochem Cell Biol* 45: 2706-2712. [link](#)
17. **Brunton PJ**<sup>†</sup>, Bales J, Russell JA (2012) Allopregnanolone and induction of endogenous opioid inhibition of oxytocin responses to immune stress in pregnant rats. *J Neuroendocrinol* 24: 690-700. [link](#)
18. **Brunton PJ**<sup>†</sup>, Donadio MV, Russell JA (2011) Sex differences in prenatally programmed anxiety behaviour in rats: differential corticotropin releasing hormone receptor mRNA expression in the amygdaloid complex. *Stress* 14: 34-43. [link](#)
19. Paris JJ, **Brunton PJ**, Russell JA, Walf AA, Frye CA (2011) Inhibition of 5 $\alpha$ -reductase activity in late pregnancy decreases gestational length and fecundity and impairs object memory and central progesterone milieu of juvenile rat offspring. *J Neuroendocrinol* 23: 1079-1090. [link](#)
20. Paris JJ, **Brunton PJ**, Russell JA, Frye CA (2011) Immune stress in late pregnant rats decreases length of gestation, fecundity, and alters later cognitive and affective behaviour of surviving offspring. *Stress* 14: 652-664. [link](#)
21. **Brunton PJ**<sup>†</sup>, Russell JA (2010) Prenatal social stress in the rat programmes neuroendocrine and behavioural responses to stress in the adult offspring: sex specific effects. *J Neuroendocrinol* 22: 258-271. [link](#)
22. Velmurugan S, **Brunton PJ**, Leng G, Russell JA (2010) Circulating secretin activates supraoptic nucleus oxytocin and vasopressin neurons via noradrenergic pathways in the rat. *Endocrinology* 151: 2861-2868. [link](#)
23. **Brunton PJ**<sup>†</sup>, McKay AJ, Ochędalski T, Rębas E, Piastowska A, Lachowicz A, Russell JA (2009) Central opioid inhibition of neuroendocrine stress responses in pregnancy in the rat is induced by the neurosteroid allopregnanolone. *J Neurosci* 29: 6449-6460. [link](#)
24. Brown CH, **Brunton PJ**, Russell JA (2008) Rapid estradiol-17 $\beta$  modulation of opioid actions on the electrical and secretory activity of rat oxytocin neurons in vivo. *Neurochem Res* 33: 614-623. [link](#)
25. **Brunton PJ**, Sausbier M, Wietzorrek G, Sausbier U, Knaus HG, Russell JA, Ruth PA, Shipston MJ (2007) HPA axis hyporesponsiveness to stress in mice deficient for large conductance voltage- and calcium- activated potassium (BK) channels. *Endocrinology* 148: 5496-5506. [link](#)
26. **Brunton PJ**<sup>†</sup>, Bales J, Russell JA (2006) Neuroendocrine stress but not feeding responses to centrally administered neuropeptide Y are suppressed in pregnant rats. *Endocrinology* 147: 3737-3745. [\*Listed by the Faculty of 1000\*] [link](#)
27. **Brunton PJ**<sup>†</sup>, Sabatier N, Leng G, Russell JA (2006) Suppressed oxytocin neurone responses to immune challenge in late pregnant rats: A role for endogenous opioids. *Eur J Neurosci* 23: 1241-1247. [link](#)
28. **Brunton PJ**<sup>†</sup>, Meddle SL, Ma S, Ochędalski T, Douglas AJ, Russell JA (2005) Endogenous opioids and attenuated hypothalamo-pituitary-adrenal axis responses to immune challenge in pregnant rats. *J Neurosci* 25: 5117-5126. [link](#)
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- lactating residents and virgin intruders during maternal defence. *Neuroscience* 124: 439-448. [link](#)
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### Review Articles

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33. Sze Y, **Brunton PJ**<sup>†</sup> (2020) Sex, Stress and Steroids. *Eur J Neurosci* 52: 2487-2515. [link](#)
34. Barrientos RM, **Brunton PJ**, Lenz KM, Pyter L, Spencer SJ (2019) Neuroimmunology of the female brain across the lifespan: plasticity to psychopathology. *Brain Behav Immun* 79: 39-55. [link](#)
35. Russell JA, **Brunton PJ**<sup>†</sup> (2019) Giving a good start to a new life via maternal brain allostatic adaptations in pregnancy. *Front Neuroendocrinol* 53: 100739. [link](#)
36. **Brunton PJ**<sup>†</sup> (2019) Endogenous opioid signalling in the brain during pregnancy and lactation. *Cell Tissue Res* 375: 69-83. [link](#)
37. **Brunton PJ**<sup>†</sup> (2016) Neuroactive steroids and stress axis regulation: Pregnancy and beyond. *J Steroid Biochem Mol Biol* 160: 160-168. [link](#)
38. **Brunton PJ**<sup>†</sup> (2015) Programming the brain and behaviour by early life stress: A focus on neuroactive steroids. *J Neuroendocrinol* 27: 468-480. [link](#)
39. Maccari S, Krugers HJ, Morley-Fletcher S, Szyf M, **Brunton PJ**<sup>†</sup> (2014) The consequences of early life adversity: neurobiological, behavioural and epigenetic adaptations. *J Neuroendocrinol* 26: 707-723. [link](#)
40. **Brunton PJ**<sup>†</sup>, Russell JA, Hirst JJ (2014) Allopregnanolone in the brain: protecting pregnancy and birth outcomes. *Prog Neurobiol* 113: 106-136. [link](#)
41. **Brunton PJ**<sup>†</sup> (2013) Effects of maternal exposure to social stress during pregnancy: consequences for mother and offspring. *Reproduction* 146: R175-189. [link](#)
42. **Brunton PJ**, Russell JA (2011) Neuroendocrine control of maternal stress responses and fetal programming by stress in pregnancy. *Prog Neuropsychopharmacol Biol Psychiatry* 35: 1178-1191. [link](#)
43. **Brunton PJ**, Russell JA (2011) Allopregnanolone and suppressed hypothalamo-pituitary-adrenal axis stress responses in late pregnancy in the rat. *Stress* 14: 6-12. [link](#)
44. **Brunton PJ**<sup>†</sup> (2010) Resetting the dynamic range of hypothalamo-pituitary-adrenal axis stress responses through pregnancy. *J Neuroendocrinol* 22: 1198-1213. [link](#)
45. **Brunton PJ**, Russell JA (2010) Endocrine induced changes in brain function during pregnancy. *Brain Res* 1364: 198-215. [link](#)
46. **Brunton PJ**, Arunachalam S, Russell JA (2008) Control of neurohypophysial hormone secretion, blood osmolality and volume in pregnancy. *J Physiol Pharmacol* 59; Suppl 8: 27-45. [link](#)

47. Russell JA, Douglas AJ, **Brunton PJ** (2008) Reduced hypothalamo-pituitary-adrenal axis stress responses in late pregnancy: central opioid inhibition and noradrenergic mechanisms. *Ann NY Acad Sci USA* 1148: 428-438. [link](#)
48. **Brunton PJ**, Russell JA, Douglas AJ (2008) Adaptive responses of the maternal hypothalamic-pituitary-adrenal axis during pregnancy and lactation. *J Neuroendocrinol* 20: 764-776. [link](#)
49. **Brunton PJ**, Russell JA (2008) The expectant brain: adapting for motherhood. *Nat Rev Neurosci* 9: 11-25. [link](#)
50. **Brunton PJ**, Russell JA (2008) Attenuated hypothalamo-pituitary-adrenal axis responses to immune challenge during pregnancy: the neurosteroid-opioid connection. *J Physiol* 586: 369-375. [link](#)
51. **Brunton PJ**, Russell JA (2008) Keeping oxytocin neurons under control during stress in pregnancy. *Prog Brain Res* 170: 365-377. [link](#)
52. Russell JA, **Brunton PJ** (2006) Neuroactive steroids attenuate oxytocin stress responses in pregnancy. *Neuroscience* 138: 879-889. [link](#)

### Book Chapters

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53. Russell JA, **Brunton PJ** (2017) Oxytocin: Control of Secretion by the Brain and Central Roles (2017) In: Reference Module in Neuroscience and Biobehavioral Psychology 1-14, Elsevier. [link](#)
54. **Brunton PJ**, Russell JA. Maternal Brain Adaptations in Pregnancy (2015) In: Plant TM, Zeleznik AJ (eds.) *Knobil and Neill's Physiology of Reproduction 4th Edition*, Elsevier. [link](#)
55. Russell JA, **Brunton PJ**. Bringing forth the next generation...and the next (2008) in *Neurobiology of the Parental Brain*, edited by R. S. Bridges, Academic Press, 13: 203-223. [link](#)
56. Russell JA, **Brunton PJ**. Oxytocin (peripheral/central actions and their regulation) (2009) In: Squire LR (ed.) *Encyclopedia of Neuroscience* 7: 337-347, Amsterdam: Elsevier. [link](#)

### Editorials/Commentaries

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57. **Brunton PJ**†, Holmes MC (2011) Stress, Brains and Bairns: Reviews from the 4<sup>th</sup> International Conference on the Parental Brain. *Stress* 14: 577-580. [link](#)
58. **Brunton PJ**†, Meddle SL (2011) Parenthood and Changing Brains. *J Neuroendocrinol* 23: 957-960. [link](#)
59. Frye CA, Hirst JJ, **Brunton PJ**, Russell JA (2011) Neurosteroids for a successful pregnancy. *Stress* 14: 1-5. [link](#)

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