

Publications for Kay Double

2019

Shehadeh, J., Double, K., Murphy, K., Bobrovskaya, L., Reyes, S., Dunkley, P., Halliday, G., Dickson, P. (2019). Expression of tyrosine hydroxylase isoforms and phosphorylation at serine 40 in the human nigrostriatal system in Parkinson's disease. *Neurobiology of Disease*, 130, 1-8. [More Information]

Weissleder, C., Barry, G., Fung, S., Wong, M., Double, K., Webster, M., Weickert, C. (2019). Reduction in IGF1 mRNA in the Human Subependymal Zone During Aging. *Aging and Disease*, 10(1), 197-204. [More Information]

2018

Trist, B., Hare, D., Double, K. (2018). A Proposed Mechanism for Neurodegeneration in Movement Disorders Characterized by Metal Dyshomeostasis and Oxidative Stress. *Cell Chemical Biology*, 25(7), 807-816. [More Information]

Trist, B., Fifita, J., Freckleton, S., Hare, D., Lewis, S., Halliday, G., Blair, I., Double, K. (2018). Accumulation of dysfunctional SOD1 protein in Parkinson's disease is not associated with mutations in the SOD1 gene. *Acta Neuropathologica*, 135(1), 155-156. [More Information]

2017

Trist, B., Davies, K., Cottam, V., Genoud, S., Ortega, R., Roudeau, S., Carmona, A., De Silva, K., Wasinger, V., Lewis, S., Ball, H., Halliday, G., Double, K., et al (2017). Amyotrophic lateral sclerosis-like superoxide dismutase 1 proteinopathy is associated with neuronal loss in Parkinson's disease brain. *Acta Neuropathologica*, 134(1), 113-127. [More Information]

Gotsbacher, M., Telfer, T., Witting, P., Double, K., Finkelstein, D., Codd, R. (2017). Analogues of desferrioxamine B designed to attenuate iron-mediated neurodegeneration: synthesis, characterisation and activity in the MPTP-mouse model of Parkinson's disease. *Metallomics*, 9(7), 852-864. [More Information]

Mathews, K., Allen, K., Boerrigter, D., Ball, H., Weickert, C., Double, K. (2017). Evidence for reduced neurogenesis in the aging human hippocampus despite stable stem cell markers. *Aging Cell*, 16(5), 1195-1199. [More Information]

Hare, D., Cardoso, B., Raven, E., Double, K., Finkelstein, D., Szymlek-Gay, E., Biggs, B. (2017). Excessive early-life dietary exposure: a potential source of elevated brain iron and a risk factor for Parkinson's disease. *NPJ Parkinson's Disease*, 3(1), 1-5. [More Information]

Purves-Tyson, T., Owens, S., Rothmond, D., Halliday, G., Double, K., Stevens, J., McCrossin, T., Weickert, C. (2017).

Putative presynaptic dopamine dysregulation in schizophrenia is supported by molecular evidence from post-mortem human midbrain. *Translational Psychiatry*, 7(1), 1-12. [More Information]

Double, K., Richards, L. (2017). Reducing the burden of neurological disease and mental illness. *Medical Journal of Australia*, 206(8), 341-342. [More Information]

Genoud, S., Roberts, B., Gunn, A., Halliday, G., Lewis, S., Ball, H., Hare, D., Double, K. (2017). Subcellular compartmentalisation of copper, iron, manganese, and zinc in the Parkinson's disease brain. *Metallomics*, 9(10), 1447-1455. [More Information]

2016

Davies, K., Mercer, J., Chen, N., Double, K. (2016). Copper dyshomeostasis in Parkinson's disease: Implications for pathogenesis and indications for novel therapeutics. *Clinical Science*, 130(8), 565-574. [More Information]

Weissleder, C., Fung, S., Wong, M., Barry, G., Double, K., Halliday, G., Webster, M., Weickert, C. (2016). Decline in proliferation and immature neuron markers in the human subependymal zone during aging: Relationship to EGF- and FGF-related transcripts. *Frontiers in Aging Neuroscience*, 8(NOV), 1-12. [More Information]

Hare, D., Double, K. (2016). Iron and dopamine: A toxic couple. *Brain*, 139(4), 1026-1035. [More Information]

Tan, B., Double, K., Burne, J., Diong, J. (2016). Tension-referenced measures of gastrocnemius slack length and stiffness in Parkinson's disease. *Movement Disorders*, 31(12), 1914-1918. [More Information]

2015

Davies, K., Hare, D., Bohic, S., James, S., Billings, J., Finkelstein, D., Doble, P., Double, K. (2015). Comparative Study of Metal Quantification in Neurological Tissue Using Laser Ablation-Inductively Coupled Plasma-Mass Spectrometry Imaging and X-ray Fluorescence Microscopy. *Analytical Chemistry*, 87(13), 6639-6645. [More Information]

Purves-Tyson, T., Boerrigter, D., Allen, K., Zavitsanou, K., Karl, T., Djunaidi, V., Double, K., Desai, R., Handelsman, D., Weickert, C. (2015). Testosterone attenuates and the selective estrogen receptor modulator, raloxifene, potentiates amphetamine-induced locomotion in male rats. *Hormones and Behavior*, 70, 73-84. [More Information]

Todd, G., Haberfield, M., Faulkner, P., Hayes, M., Wilcox, R., Rae, C., Bulathsinhala, T., Grunstein, R., Yee, B., Double, K. (2015). Upper limb function is normal in patients with restless legs syndrome (Willis-Ekbom Disease). *Clinical Neurophysiology*, 126(4), 736-742. [More Information]

Schroeder, R., Double, K., Gerber, J. (2015). Using Sepia melanin as a PD model to describe the binding characteristics of neuromelanin - A critical review. *Journal of Chemical Neuroanatomy*, 64-65, 20-32. [More Information]

2014

Davies, K., Bohic, S., Carmona, A., Ortega, R., Cottam, V., Hare, D., Finberg, J., Reyes, S., Halliday, G., Mercer, J., Double, K. (2014). Copper pathology in vulnerable brain regions in Parkinson's disease. *Neurobiology of Aging*, 35(4), 858-866. [More Information]

Todd, G., Haberfield, M., Faulkner, P., Rae, C., Hayes, M., Wilcox, R., Taylor, J., Gandevia, S., Godau, J., Berg, D., Double, K., et al (2014). Hand function is impaired in healthy older adults at risk of Parkinson's disease. *Journal of Neural Transmission*, 121(11), 1377-1386. [More Information]

Hall, H., Reyes, S., Landeck, N., Bye, C., Leanza, G., Double, K., Thompson, L., Halliday, G., Kirik, D. (2014). Hippocampal Lewy pathology and cholinergic dysfunction are associated with dementia in Parkinson's disease. *Brain*, 137(9), 2493-2508. [More Information]

Purves-Tyson, T., Owens, S., Double, K., Desai, R., Handelsman, D., Weickert, C. (2014). Testosterone Induces Molecular Changes in Dopamine Signaling Pathway Molecules in the Adolescent Male Rat Nigrostriatal Pathway. *PloS One*, 9(3), 1-12. [More Information]

2013

Dickson, P., Shehadeh, J., Double, K., Bobrovskaya, L., Reyes, S., Dunkley, P., Halliday, G. (2013). Analysis of Tyrosine Hydroxylase Isoforms and Phosphorylation in Parkinson's Disease. In Lee E. Eiden (Eds.), *Catecholamine Research in the 21st Century: Abstracts and Graphical Abstracts, 10th International Catecholamine Symposium, 2012*, (pp. 15-15). London: Elsevier. [More Information]

Dang, T., Dobson-Stone, C., Glaros, E., Kim, W., Hallupp, M., Bartley, L., Piguet, O., Hodges, J., Halliday, G., Double, K., et al (2013). Endogenous progesterone levels and frontotemporal dementia: Modulation of TDP-43 and Tau levels in vitro and treatment of the A315T TARDBP mouse model. *Disease Models and Mechanisms*, 6(5), 1198-1204. [More Information]

Davies, K., Hare, D., Cottam, V., Chen, N., Hilgers, L., Halliday, G., Mercer, J., Double, K. (2013). Localization of copper and copper transporters in the human brain. *Metallomics*, 5(1), 43-51. [More Information]

Double, K., Finberg, J. (2013). Parkinson's Disease. In Donald W. Pfaff (Eds.), *Neuroscience in the 21st Century: From Basic to Clinical*, (pp. 2903-2921). New York: Springer.

Reyes, S., Fu, Y., Double, K., Cottam, V., Thompson, L., Kirik, D., Paxinos, G., Watson, C., Cooper, H., Halliday, G. (2013). Trophic factors differentiate dopamine neurons vulnerable to Parkinson's disease. *Neurobiology of Aging*, 34(3), 873-886. [More Information]

Reyes, S., Cottam, V., Kirik, D., Double, K., Halliday, G. (2013). Variability in neuronal expression of dopamine receptors and transporters in the substantia nigra. *Movement Disorders*, 28(10), 1351-1359. [More Information]

2012

Reyes, S., Fu, Y., Double, K., Thompson, L., Kirik, D., Paxinos, G., Halliday, G. (2012). GIRK2 expression in dopamine neurons of the substantia nigra and ventral tegmental area. *Journal of Comparative Neurology*, 520(12), 2591-2607. [More Information]

Chan, S., Dunlop, R., Rowe, A., Double, K., Rodgers, K. (2012). L-DOPA is incorporated into brain proteins of patients treated for Parkinson's disease, inducing toxicity in human neuroblastoma cells in vitro. *Experimental Neurology*, 238(1), 29-37. [More Information]

Double, K. (2012). Neuronal vulnerability in Parkinson's disease. *Parkinsonism and Related Disorders*, 18(Suppl 1), S52-S54. [More Information]

Double, K., Halliday, G., Reyes, S. (2012). Substantia Nigra, Ventral Tegmental Area and Retrorubral Fields. In Juergen K. Mai and George Paxinos (Eds.), *The Human Nervous System*, (pp. 439-455). London: Academic Press.

Halliday, G., Reyes, S., Double, K. (2012). Substantia Nigra, Ventral Tegmental Area, and Retrorubral Fields. In Juergen K. Mai and George Paxinos (Eds.), *The Human Nervous System*, (pp. 439-455). London: Academic Press. [More Information]

Purves-Tyson, T., Handelsman, D., Double, K., Owens, S., Bustamante, S., Weickert, C. (2012). Testosterone regulation of sex steroid-related mRNAs and dopamine-related mRNAs in adolescent male rat substantia nigra. *BMC Neuroscience*, 13(1), 1-12. [More Information]

2011

Double, K., Maruyama, W., Naoi, M., Gerlach, M., Riederer, P. (2011). Biological Role of Neuromelanin in the Human Brain and Its Importance in Parkinson's Disease. In Jan Borovansky, Patrick A. Riley (Eds.), *Melanins and Melanosomes: Biosynthesis, Biogenesis, Physiological, and Pathological Functions*, (pp. 225-246). Weinheim, Germany: Wiley - V C H Verlag GmbH & Co. KGaA.

2010

Kurz, A., Double, K., Lastres-Becker, I., Tozzi, A., Tantucci, M., Bockhart, V., Bonin, M., Garcia-Arencibia, M., Nuber, S., Schlaudraff, F. (2010). A53T-alpha-synuclein overexpression impairs dopamine signaling and striatal synaptic plasticity in

old mice. *PLoS One*, 5(7), 1-15. [More Information]

Werry, E., Enjeti, S., Halliday, G., Sachdev, P., Double, K. (2010). Effect of age on proliferation-regulating factors in human adult neurogenic areas. *Journal of Neurochemistry*, 115(4), 956-964. [More Information]

Schofield, E., Halliday, G., Kwok, J., Loy, C., Double, K., Hodges, J. (2010). Low Serum Progranulin Predicts the Presence of Mutations: A Prospective Study. *Journal of Alzheimer's Disease*, 22(3), 981-984. [More Information]

Double, K., Todd, G., Duma, S. (2010). Pathophysiology of transcranial sonography signal changes in the human substantia nigra. *International Review of Neurobiology*, 90(C), 107-120. [More Information]

Double, K., Halliday, G., Dunkley, P., Dickson, P., Gerlach, M., Riederer, P. (2010). Pigmentation in the human brain and risk of Parkinson's disease. *Annals of Neurology*, 67(4), 553-554. [More Information]

Double, K., Reyes, S., Werry, E., Halliday, G. (2010). Selective cell death in neurodegeneration: why are some neurons spared in vulnerable regions? *Progress in Neurobiology*, 92(3), 316-329. [More Information]

2009

Double, K., Rowe, D., Carew-Jones, F., Hayes, M., Chan, D., Blackie, J., Corbett, A., Joffe, R., Fung, V., Morris, J., et al (2009). Anti-melanin antibodies are increased in sera in Parkinson's disease. *Experimental Neurology*, 217, 297-301. [More Information]

Piguet, O., Double, K., Kril, J., Harasty, J., Macdonald, V., McRitchie, D., Halliday, G. (2009). White matter loss in healthy ageing: A postmortem analysis. *Neurobiology of Aging*, 30(8), 1288-1295. [More Information]

2008

Sutherland, G., Mellick, G., Newman, J., Double, K., Stevens, J., Lee, L., Rowe, D., Silburn, P., Halliday, G. (2008). Haplotype analysis of the IGF2-INS-TH gene cluster in Parkinson's disease. *American Journal of Medical Genetics, Part B: Neuropsychiatric Genetics*, 147B (4), 495-499. [More Information]

Bohic, S., Murphy, K., Paulus, W., Cloetens, P., Salome, M., Susini, J., Double, K. (2008). Intracellular chemical imaging of the developmental phases of human neuromelanin using synchrotron X-ray microspectroscopy. *Analytical Chemistry*, 80(24), 9557-9566. [More Information]

Gerlach, M., Riederer, P., Double, K. (2008). Neuromelanin-bound ferric iron as an experimental model of dopaminergic neurodegeneration in Parkinson's disease. *Parkinsonism and Related Disorders*, 14(Suppl. 2), S185-S188. [More Information]

e Information]

Double, K., Dedov, V., Fedorow, H., Kettle, E., Halliday, G., Garner, B., Brunk, U. (2008). The comparative biology of neuromelanin and lipofuscin in the human brain. *Cellular and Molecular Life Sciences*, 65, 1669-1682. [More Information]

2007

Gerlach, M., Deckert, J., Double, K., Koutsilieri, E. (2007). Journal of Neural Transmission, Supplementa: Preface. *Journal of Neural Transmission, Supplementa*, 27, V-VI.

Dedov, V., Griffiths, F., Garner, B., Halliday, G., Double, K. (2007). Lipid content determines aggregation of neuromelanin granules in vitro. *Journal of Neural Transmission, Supplementa*, 72, 35-38. [More Information]

Gerlach, M., Deckert, J., Double, K., Koutsilieri, E. (2007). *Neuropsychiatric disorders: an integrative approach*. *J. Neural Trans. Suppl* 72. New York: Springer.

Behnke, S., Double, K., Duma, S., Broe, G., Guenther, V., Becker, G., Halliday, G. (2007). Substantia nigra ecomorphology in the healthy very old: Correlation with motor slowing. *NeuroImage*, 34(3), 1054-1059. [More Information]

Behnke, S., Double, K., Duma, S., Broe, G., Guenther, V., Becker, G., Halliday, G. (2007). Substantia nigra ecomorphology in the healthy very old: Correlation with motor slowing. *NeuroImage*, 34(3), 1054-1059. [More Information]

2006

Halliday, G., Fedorow, H., Rickert, C., Gerlach, M., Riederer, P., Double, K. (2006). Evidence for specific phases in the development of human neuromelanin. *Journal of Neural Transmission*, 113, 721-728. [More Information]

Fedorow, H., Halliday, G., Rickert, C., Gerlach, M., Riederer, P., Double, K. (2006). Evidence for specific phases in the development of human neuromelanin. *Neurobiology of Aging*, 27(3), 506-512. [More Information]

Fedorow, H., Pickford, R., Kettle, E., Cartwright, M., Halliday, G., Gerlach, M., Riederer, P., Garner, B., Double, K. (2006). Investigation of the lipid component of neuromelanin. *Journal of Neural Transmission*, 113, 735-739. [More Information]

2005

Fedorow, H., Pickford, R., Hook, J., Double, K., Halliday, G., Gerlach, M., Riederer, P., Garner, B. (2005). Dolichol is the major lipid component of human substantia nigra neuromelanin. *Journal of Neurochemistry*, 92, 990-995. [More Information]

Fedorow, H., Tribl, F., Halliday, G., Gerlach, M., Riederer, P., Double, K. (2005). Neuromelanin in human dopamine neurons: Comparison with peripheral melanins and relevance to Parkinson's disease. *Progress in Neurobiology*, 75, 109-124. [More Information]

<http://dx.doi.org/10.1016/j.pneurobio.2005.02.001>>[More Information]

Halliday, G., Ophof, A., Broe, M., Jensen, P., Kettle, E., Fedorow, H., Cartwright, M., Griffiths, F., Shepherd, C., Double, K. (2005). α -Synuclein redistributes to neuromelanin lipid in the substantia nigra early in Parkinson's disease. *Brain*, 128, 2654-2664. [More Information]

2003

Halliday, G., Double, K., Macdonald, V., Kril, J. (2003). Identifying severely atrophic cortical subregions in Alzheimer's disease. *Neurobiology of Aging*, 24(6), 797-806. [More Information]

Double, K., Rowe, D., Hayes, M., Chan, D., Blackie, J., Corbett, A., Joffe, R., Fung, V., Morris, J., Halliday, G. (2003). Identifying the Pattern of Olfactory Deficits in Parkinson Disease Using the Brief Smell Identification Test. *JAMA Neurology*, 60(4), 545-549. [More Information]

Double, K., Halliday, G., Henderson, J., Griffiths, F., Heinemann, T., Riederer, P., Gerlach, M. (2003). The dopamine receptor agonist lisuride attenuates iron-mediated dopaminergic neurodegeneration. *Experimental Neurology*, 184(1), 530-535. [More Information]