**References Chapter 8**

Altschuler, S. M., Bao, X. M., Bieger, D., Hopkins, D. A., and Miselis, R. R. (1989) Viscerotopic representation of the upper alimentary tract in the rat: sensory ganglia and nuclei of the solitary and spinal trigeminal tracts. *J.Comp.Neurol.* **283**, 248-268

Altschuler, S. M., Ferenci, D. A., Lynn, R. B., and Miselis, R. R. (1991) Representation of the cecum in the lateral dorsal motor nucleus of the vagus nerve and commissural subnucleus of the nucleus tractus solitarii in rat. *J.Comp.Neurol.* **304**, 261-274

Altschuler, S. M., Rinaman, L., and Miselis, R. R. (1992) Viscerotopic representation of the alimentary tract in the dorsal and ventral vagal complexes in the rat. In *Neuroanatomy and Physiology of Abdominal Vagal Afferents* (Ritter, S., Ritter, R. C., and Barnes, C. D., eds) pp. 22-53, CRC Press, Boca Raton

Andresen, M. C., and Paton, J. F. R. (2011) The nucleus of the solitary tract: processing information from visceral afferents. In *Central Regulation of Autonomic Functions, 2nd edition* (Llewellyn-Smith, I. J., and Verberne, A. J. M., eds) pp. 23-46, Oxford University Press, Oxford

Appenzeller, O. (1999) The autonomic nervous system. Part I: Normal functions. In *Handbook of clinical neurology* (Vinken, P. J., and Bruyn, G. W., eds) Vol. 74, Elsevier, Amsterdam

Bahr, R., Bartel, B., Blumberg, H., and Jänig, W. (1986) Secondary functional properties of lumbar visceral preganglionic neurons. *J.Auton.Nerv.Syst.* **15**, 141-152

Bamshad, M., Aoki, V. T., Adkison, M. G., Warren, W. S., and Bartness, T. J. (1998) Central nervous system origins of the sympathetic nervous system outflow to white adipose tissue. *Am.J.Physiol.* **275**, R291-R299

Bamshad, M., Song, C. K., and Bartness, T. J. (1999) CNS origins of the sympathetic nervous system outflow to brown adipose tissue. *Am.J.Physiol.* **276**, R1569-R1578

Bard, P. (1960) Anatomical organization of the central nervous system in relation to control of the heart and blood vessels. *Physiol Rev* **40(Suppl 4)**, 3-26

Baron, R., and Jänig, W. (1991) Afferent and sympathetic neurons projecting into lumbar visceral nerves of the male rat. *J.Comp.Neurol.* **314**, 429-436

Baron, R., Jänig, W., and McLachlan, E. M. (1985a) The afferent and sympathetic components of the lumbar spinal outflow to the colon and pelvic organs in the cat: I. The hypogastric nerve. *J.Comp.Neurol.* **238**, 135-146

Baron, R., Jänig, W., and McLachlan, E. M. (1985b) The afferent and sympathetic components of the lumbar spinal outflow to the colon and pelvic organs in the cat. II. The lumbar splanchnic nerves. *J.Comp.Neurol.* **238**, 147-157

Baron, R., Jänig, W., and McLachlan, E. M. (1985c) The afferent and sympathetic components of the lumbar spinal outflow to the colon and pelvic organs in the cat. III. The colonic nerves, incorporating an analysis of all components of the lumbar prevertebral outflow. *J.Comp.Neurol.* **238**, 158-168

Baron, R., Jänig, W., and With, H. (1995) Sympathetic and afferent neurones projecting into forelimb and trunk nerves and the anatomical organization of the thoracic sympathetic outflow of the rat. *J.Auton.Nerv.Syst.* **53**, 205-214

Berthoud, H. R., and Neuhuber, W. L. (2000) Functional and chemical anatomy of the afferent vagal system. *Auton.Neurosci.* **85**, 1-17

Berthoud, H. R., and Powley, T. L. (1990) Identification of vagal preganglionics that mediate cephalic phase insulin response. *Am.J Physiol* **258**, R523-R530

Bieger, D., and Hopkins, D. A. (1987) Viscerotopic representation of the upper alimentary tract in the medulla oblongata in the rat: the nucleus ambiguus. *J.Comp.Neurol.* **262**, 546-562

Berthoud, H. R., Fox, E. A., and Powley, T. L. (1990) Localization of vagal preganglionics that stimulate insulin and glucagon secretion. *Am.J Physiol* **258**, R160-R168

Berthoud, H. R., Carlson, N. R., and Powley, T. L. (1991) Topography of efferent vagal innervation of the rat gastrointestinal tract. *Am.J.Physiol.* **260**, R200-207

Blessing, W. W. (1997) *The brain stem and bodily homeostasis*, Oxford University Press, New York, Oxford

Blessing, W. W., Li, Y. W., and Wesselingh, S. L. (1991) Transneuronal transport of herpes simplex virus from the cervical vagus to brain neurons with axonal inputs to central vagal sensory nuclei in the rat. *Neuroscience* **42**, 261-274

Brooke, R. E., Pyner, S., McLeish, P., Buchan, S., Deuchars, J., and Deuchars, S. A. (2002) Spinal cord interneurones labelled transneuronally from the adrenal gland by a GFP-herpes virus construct contain the potassium channel subunit Kv3.1b. *Auton.Neurosci* **98**, 45-50

Buijs, R.M., and Swaab, D. F. (eds.)(2013) *Autonomic Nervous System* Handbook of Clinical Neurology, Vol. Vol 117, Elsevier, Amsterdam

Cabot, J. B. (1990) Sympathetic preganglionic neurons: cytoarchitecture, ultrastructure, and biophysical properties. In *Central regulation of autonomic functions* (Loewy, A. D., and Spyer, K. M., eds) pp. 44-67, Oxford University Press, New York, Oxford

Cabot, J. B. (1996) Some principles of the spinal organization of the sympathetic preganglionic outflow. *Prog.Brain Res.* **107**, 29-42

Cabot, J. B., Alessi, V., Carroll, J., and Ligorio, M. (1994) Spinal cord lamina V and lamina VII interneuronal projections to sympathetic preganglionic neurons. *J.Comp.Neurol.* **347**, 515-530

Cano, G., Card, J. P., Rinaman, L., and Sved, A. F. (2000) Connections of Barrington's nucleus to the sympathetic nervous system in rats. *J.Auton.Nerv.Syst.* **79**, 117-128

Cano, G., Sved, A. F., Rinaman, L., Rabin, B. S., and Card, J. P. (2001) Characterization of the central nervous system innervation of the rat spleen using viral transneuronal tracing. *J Comp Neurol.* **439**, 1-18

Card, J. P., Rinaman, L., Schwaber, J. S., Miselis, R. R., Whealy, M. E., Robbins, A. K., and Enquist, L. W. (1990) Neurotropic properties of pseudorabies virus: uptake and transneuronal passage in the rat central nervous system. *J.Neurosci.* **10**, 1974-1994

Cechetto, D. F., and Saper, C. B. (1990) Role of the cerebral cortex in autonomic function. In *Central regulation of autonomic functions* (Loewy, A. D., and Spyer, K. M., eds) pp. 208-223, Oxford University Press, New York, Oxford

Ciriello, J., Hochstenbach, S. L., and Roder, S. (1994) Central projections of baroreceptor and chemoreceptor afferent fibers in the rat. In *Nucleus of the Solitary Tract* (Barraco, I. R. A., ed) pp. 35-50, CRC Press, Boca Raton

Contreras, R. J., Gomez, M. M., and Norgren, R. (1980) Central origins of cranial nerve parasympathetic neurons in the rat. *J Comp Neurol* **190**, 373-394

Costa, M., and Furness, J. B. (1973) The origins of the adrenergic fibres which innervate the internal anal sphincter, the rectum, and other tissues of the pelvic region in the guinea-pig. *Zeitschrift fur Anatomie und Entwicklungsgeschichte* **140**, 129-142

Dalsgaard, C. J., and Elfvin, L. G. (1982) Structural studies on the connectivity of the inferior mesenteric ganglion of the guinea pig. *J.Auton.Nerv.Syst.* **5**, 265-278

De Groat, W. C. (2013) Neural control of the urinary bladder. In *Autonomic Failure, 5th edition* (Mathias, C. J., and Bannister, R., eds) pp. 108-118, Oxford University Press, New York Oxford

De Groat, W. C., Vizzard, M. A., Araki, I., and Roppolo, J. R. (1996) Spinal interneurons and preganglionic neurons in sacral autonomic reflex pathways. *Prog Brain Res* **107**, 97-112

Dembowsky, K., Czachurski, J., and Seller, H. (1985) Morphology of sympathetic preganglionic neurons in the thoracic spinal cord of the cat: an intracellular horseradish peroxidase study. *J.Comp.Neurol.* **238**, 453-465

Deuchars, S. A. (2011) Spinal interneurons in the control of autonomic functions. In *Central Regulation of Autonomic Functions, 2nd edition* (Llewellyn-Smith, I. J., and Verberne, A. J. M., eds) pp. 140-160, Oxford University Press, Oxford

Deuchars, S. A. (2015) How sympathetic are your spinal cord circuits? *Experimental Physiology* **100**, 365-371

Deuchars, S. A., Brooke, R. E., Frater, B., and Deuchars, J. (2001) Properties of interneurones in the intermediolateral cell column of the rat spinal cord: role of the potassium channel subunit Kv3.1. *Neuroscience* **106**, 433-446

Deuchars, S. A., and Lall, V. K. (2015) Sympathetic preganglionic neurons: properties and inputs. *Comprehensive Physiology* **5**, 829-869

Enquist, L. W., and Card, J. P. (2003) Recent advances in the use of neurotropic viruses for circuit analysis. *Curr.Opin.Neurobiol.* **13**, 603-606

Farkas, E., Jansen, A. S., and Loewy, A. D. (1998) Periaqueductal gray matter input to cardiac-related sympathetic premotor neurons. *Brain Res.* **792**, 179-192

Fox, E. A., and Powley, T. L. (1985) Longitudinal columnar organization within the dorsal motor nucleus represents separate branches of the abdominal vagus. *Brain Res.* **341**, 269-282

Fox, E. A., and Powley, T. L. (1992) Morphology of identified preganglionic neurons in the dorsal motor nucleus of the vagus. *J.Comp.Neurol.* **322**, 79-98

Gamlin, P. D. R. (2000) Functions of the Edinger-Westphal nucleus. In *Nervous control of the eye.* (A.M.Sillito, G. B. a., ed) pp. 117-154, Harwood Academic Publisher, Amsterdam

Geerling, J. C., Mettenleiter, T. C., and Loewy, A. D. (2003) Orexin neurons project to diverse sympathetic outflow systems. *Neuroscience* **122**, 541-550

Gerfen, C. R., and Sawchenko, P. E. (1984) An anterograde neuroanatomical tracing method that shows the detailed morphology of neurons, their axons and terminals: immunohistochemical localization of an axonally transported plant lectin, Phaseolus vulgaris leucoagglutinin (PHA-L). *Brain Res.* **290**, 219-238

Granit, R. (1981) Comments on history of motor control. In *Motor Control, part I, Handbook of Physiology, section I, The Nervous System, Vol. II* (Brooks, V. B., ed) pp. 1-16, Am.Physiol.Soc., Bethesda

Guyenet, P. G., Schreihofer, A. M., and Stornetta, R. L. (2001) Regulation of sympathetic tone and arterial pressure by the rostral ventrolateral medulla after depletion of C1 cells in rats. *Ann N.Y.Acad.Sci.* **940**, 259-269

Hadziefendic, S., and Haxhiu, M. A. (1999) CNS innervation of vagal preganglionic neurons controlling peripheral airways: a transneuronal labeling study using pseudorabies virus. *J.Auton.Nerv.Syst.* **76**, 135-145

Hancock, M. B., and Peveto, C. A. (1979) A preganglionic autonomic nucleus in the dorsal gray commissure of the lumbar spinal cord of the rat. *J Comp Neurol* **183**, 65-72

Haxhiu, M. A., and Loewy, A. D. (1996) Central connections of the motor and sensory vagal systems innervating the trachea. *J.Auton.Nerv.Syst.* **57**, 49-56

Haxhiu, M. A., Jansen, A. S., Cherniack, N. S., and Loewy, A. D. (1993) CNS innervation of airway-related parasympathetic preganglionic neurons: a transneuronal labeling study using pseudorabies virus. *Brain Res.* **618**, 115-134

Haxhiu, M. A., Erokwu, B., Bhardwaj, V., and Dreshaj, I. A. (1998) The role of the medullary raphe nuclei in regulation of cholinergic outflow to the airways. *J.Auton.Nerv.Syst.* **69**, 64-71

Herbert, H., Moga, M. M., and Saper, C. B. (1990) Connections of the parabrachial nucleus with the nucleus of the solitary tract and the medullary reticular formation in the rat. *J.Comp.Neurol.* **293**, 540-580

Honda, C. N., and Perl, E. R. (1985) Functional and morphological features of neurons in the midline region of the caudal spinal cord of the cat. *Brain research* **340**, 285-295

Hopkins, D. A., Bieger, D., deVente, J., and Steinbusch, W. M. (1996) Vagal efferent projections: viscerotopy, neurochemistry and effects of vagotomy. *Prog.Brain Res.* **107**, 79-96

Hosoya, Y., Sugiura, Y., Okado, N., Loewy, A. D., and Kohno, K. (1991) Descending input from the hypothalamic paraventricular nucleus to sympathetic preganglionic neurons in the rat. *Exp.Brain Res.* **85**, 10-20

Huang, J., and Weiss, M. L. (1999) Characterization of the central cell groups regulating the kidney in the rat. *Brain Res.* **845**, 77-91

Izzo, P. N., Deuchars, J., and Spyer, K. M. (1993) Localization of cardiac vagal preganglionic motoneurones in the rat: immunocytochemical evidence of synaptic inputs containing 5- hydroxytryptamine. *J.Comp.Neurol.* **327**, 572-583

Jänig, W. (1985) Organization of the lumbar sympathetic outflow to skeletal muscle and skin of the cat hindlimb and tail. *Rev.Physiol.Biochem.Pharmacol.* **102**, 119-213

Jänig, W. (1986) Spinal cord integration of visceral sensory systems and sympathetic nervous system reflexes. *Prog.Brain Res.* **67**, 255-277

Jänig, W. (1996a) Regulation of the lower urinary tract. In *Comprehensive Human Physiology, Vol. 2* (Greger, R., and Windhorst, U., eds) pp. 1611-1624, Springer-Verlag, Berlin, Heidelberg

Jänig, W. (1996b) Behavioral and neurovegetative components of reproductive functions. In *Comprehensive Human Physiology, Vol. 2* (Greger, R., and Windhorst, U., eds) pp. 2253-2263, Springer-Verlag, Berlin, Heidelberg

Jänig, W. (2014) Sympathetic nervous system and inflammation: a conceptual view. *Autonomic neuroscience : basic & clinical* **182**, 4-14

Jänig, W., and McLachlan, E. M. (1986a) The sympathetic and sensory components of the caudal lumbar sympathetic trunk in the cat. *J.Comp.Neurol.* **245**, 62-73

Jänig, W., and McLachlan, E. M. (1986b) Identification of distinct topographical distributions of lumbar sympathetic and sensory neurons projecting to end organs with different functions in the cat. *J.Comp.Neurol.* **246**, 104-112

Jänig, W., and McLachlan, E. M. (1987) Organization of lumbar spinal outflow to distal colon and pelvic organs. *Physiol.Rev.* **67**, 1332-1404

Jansen, A. S., and Loewy, A. D. (1997) Neurons lying in the white matter of the upper cervical spinal cord project to the intermediolateral cell column. *Neuroscience* **77**, 889-898

Jansen, A. S., Ter Horst, G. J., Mettenleiter, T. C., and Loewy, A. D. (1992) CNS cell groups projecting to the submandibular parasympathetic preganglionic neurons in the rat: a retrograde transneuronal viral cell body labeling study. *Brain Res.* **572**, 253-260

Jansen, A. S., Wessendorf, M. W., and Loewy, A. D. (1995a) Transneuronal labeling of CNS neuropeptide and monoamine neurons after pseudorabies virus injections into the stellate ganglion. *Brain Res.* **683**, 1-24

Jansen, A. S., Nguyen, X. V., Karpitskiy, V., Mettenleiter, T. C., and Loewy, A. D. (1995b) Central command neurons of the sympathetic nervous system: basis of the fight-or-flight response. *Science* **270**, 644-646

Jones, J. F., Wang, Y., and Jordan, D. (1998) Activity of C fibre cardiac vagal efferents in anaesthetized cats and rats. *J Physiol* **507 ( Pt 3)**, 869-880

Kalia, M., and Richter, D. (1985a) Morphology of physiologically identified slowly adapting lung stretch receptor afferents stained with intra-axonal horseradish peroxidase in the nucleus of the tractus solitarius of the cat. I. A light microscopic analysis. *J.Comp.Neurol.* **241**, 503-520

Kalia, M., and Richter, D. (1985b) Morphology of physiologically identified slowly adapting lung stretch receptor afferents stained with intra-axonal horseradish peroxidase in the nucleus of the tractus solitarius of the cat. II. An ultrastructural analysis. *J.Comp.Neurol.* **241**, 521-535

Kalia, M., and Richter, D. (1988a) Rapidly adapting pulmonary receptor afferents: I. Arborization in the nucleus of the tractus solitarius. *J.Comp.Neurol.* **274**, 560-573

Kalia, M., and Richter, D. (1988b) Rapidly adapting pulmonary receptor afferents: II. Fine structure and synaptic organization of central terminal processes in the nucleus of the tractus solitarius. *J.Comp.Neurol.* **274**, 574-594

Kim, M., Chiego, D. J., Jr., and Bradley, R. M. (2004) Morphology of parasympathetic neurons innervating rat lingual salivary glands. *Auton.Neurosci* **111**, 27-36

Langley, J. N. (1891) On the course and connections of the secretory fibres supplying the sweat glands of the feet of the cat. *J.Physiol.(Lond)* **12**, 347-374

Langley, J. N. (1894a) The arrangement of the sympathetic nervous system, based chiefly on observation upon pilo-motor nerves. *J.Physiol.(Lond)* **15**, 176-244

Langley, J. N. (1894b) Further observations on the secretory and vaso-motor fibres of the foot of the cat, with notes on other sympathetic nerve fibres. *J.Physiol.(Lond)* **17**, 296-314

Langley, J. N., and Anderson, H. K. (1895a) On the innervation of the pelvic and adjoining viscera. Part I. The lower portion of the intestine. *J.Physiol.(Lond)* **18**, 67-105

Langley, J. N., and Anderson, H. K. (1895b) The innervation of the pelvic and adjoining viscera. Part II. The bladder. *J.Physiol.(Lond)* **19**, 71-84

Langley, J. N., and Anderson, H. K. (1895c) The innervation of the pelvic and adjoining viscera. Part III. The external generative organs. *J.Physiol.(Lond)* **19**, 85-121

Langley, J. N., and Anderson, H. K. (1895d) The innervation of the pelvic and adjoining viscera. Part IV. The internal generative organs. *J.Physiol.(Lond)* **19**, 122-130

Langley, J. N., and Sherrington, C. S. (1891) On pilo-motor nerves. *J.Physiol.(Lond)* **12**, 278-291

Larsen, P. J., Enquist, L. W., and Card, J. P. (1998) Characterization of the multisynaptic neuronal control of the rat pineal gland using viral transneuronal tracing. *Eur.J.Neurosci.* **10**, 128-145

Loewy, A. D. (1990a) Central autonomic pathways. In *Central regulation of autonomic functions* (Loewy, A. D., and Spyer, K. M., eds) pp. 88-103, Oxford University Press, New York, Oxford

Loewy, A. D. (1990b) Autonomic control of the eye. In *Central Regulation of Autonomic Functions* (Loewy, A. D., and Spyer, K. M., eds) pp. 268-285, Cambridge University Press, New York Oxford

Loewy, A. D. (1998) Viruses as transneuronal tracers for defining neural circuits. *Neurosci Biobehav.Rev* **22**, 679-684

Loewy, A. D., and Burton, H. (1978) Nuclei of the solitary tract: efferent projections to the lower brain stem and spinal cord of the cat. *J.Comp.Neurol.* **181**, 421-449

Loewy, A. D., and Spyer, K. M. (1990) Vagal preganglionic neurons. In *Central regulation of autonomic functions* (Loewy, A. D., and Spyer, K. M., eds) pp. 68-87, Oxford University Press, New York, Oxford

Loewy, A. D., and Haxhiu, M. A. (1993) CNS cell groups projecting to pancreatic parasympathetic preganglionic neurons. *Brain Res.* **620**, 323-330

Loewy, A. D., Franklin, M. F., and Haxhiu, M. A. (1994) CNS monoamine cell groups projecting to pancreatic vagal motor neurons: a transneuronal labeling study using pseudorabies virus. *Brain Res.* **638**, 248-260

Marson, L. (1995) Central nervous system neurons identified after injection of pseudorabies virus into the rat clitoris. *Neurosci.Lett.* **190**, 41-44

Marson, L. (1997) Identification of central nervous system neurons that innervate the bladder body, bladder base, or external urethral sphincter of female rats: a transneuronal tracing study using pseudorabies virus. *J.Comp.Neurol.* **389**, 584-602

Marson, L., and McKenna, K. E. (1996) CNS cell groups involved in the control of the ischiocavernosus and bulbospongiosus muscles: a transneuronal tracing study using pseudorabies virus. *J.Comp.Neurol.* **374**, 161-179

Marson, L., Platt, K. B., and McKenna, K. E. (1993) Central nervous system innervation of the penis as revealed by the transneuronal transport of pseudorabies virus. *Neuroscience* **55**, 263-280

Mason, P. (2001) Contributions of the medullary raphe and ventromedial reticular region to pain modulation and other homeostatic functions. *Annu.Rev Neurosci.* **24**, 737-777

Mathias, C. J., and Bannister, R.(eds.)(2013) *Autonomic failure, 5th edition*, Oxford University Press, Oxford

Matsuo, R., and Kang, Y. (1998) Two types of parasympathetic preganglionic neurones in the superior salivatory nucleus characterized electrophysiologically in slice preparations of neonatal rats. *J Physiol* **513**, 157-170

McDougal, D. H., and Gamlin, P. D. (2015) Autonomic control of the eye. *Comprehensive Physiology* **5**, 439-473

McEwen, B. S. (2001) Neurobiology of interpreting and responding to stressful events: paradigmatic role of the hippocampus. In *Handbook of Physiology. Section 7: The Endocrine System. Vol. IV: Coping with the Environment: Neural and Neuroendocrine Mechanisms* (McEwen, B. S., ed) pp. 155-178, Oxford University Press, Oxford

McKenna, K. E. (2000) The neural control of female sexual function. *NeuroRehabilitation.* **15**, 133-143

McKenna, K. E. (2001) Neural circuitry involved in sexual function. *J.Spinal Cord.Med.* **24**, 148-154

McKenna, K. E. (2013) The autonomic neuroscience of sexual function. In *Autonomic Failure, 5th edition* (Bannister, R., and Mathias, C. J., eds.) pp. 119-131, Oxford University Press, New York Oxford

McLachlan, E. M. (1985) The components of the hypogastric nerve in male and female guinea pigs. *J.Auton.Nerv.Syst.* **13**, 327-342

Molander, C., and Grant, G. (1995) Spinal cord cytoarchitecture. In *The Rat Nervous System* (Paxinos, G., ed) pp. 39-45, Academic Press, San Diego

Morgan, C. W., De Groat, W. C., Felkins, L. A., and Zhang, S. J. (1993) Intracellular injection of neurobiotin or horseradish peroxidase reveals separate types of preganglionic neurons in the sacral parasympathetic nucleus of the cat. *J.Comp.Neurol.* **331**, 161-182

Murphy, S. M., Matthew, S. E., Rodgers, H. F., Lituri, D. T., and Gibbins, I. L. (1998) Synaptic organisation of neuropeptide-containing preganglionic boutons in lumbar sympathetic ganglia of guinea pigs. *J Comp Neurol* **398**, 551-567

Nadelhaft, I., and Vera, P. L. (1995) Central nervous system neurons infected by pseudorabies virus injected into the rat urinary bladder following unilateral transection of the pelvic nerve. *J.Comp.Neurol.* **359**, 443-456

Nadelhaft, I., Vera, P. L., Card, J. P., and Miselis, R. R. (1992) Central nervous system neurons labelled following the injection of pseudorabies virus into the rat urinary bladder. *Neurosci.Lett.* **143**, 271-274

Neuhuber, W., and Schrödl, F. (2011) Autonomic control of the eye and the iris. *Autonomic neuroscience : basic & clinical* **165**, 67-79

Nilsson, S. (1983) *Autonomic nerve function in the vertebrates* Vol. 13, Springer Verlag, Berlin

Oldfield, B. J., and McLachlan, E. M. (1981) An analysis of the sympathetic preganglionic neurons projecting from the upper thoracic spinal roots of the cat. *J.Comp.Neurol.* **196**, 329-345

Orr, R., and Marson, L. (1998) Identification of CNS neurons innervating the rat prostate: a transneuronal tracing study using pseudorabies virus. *J.Auton.Nerv.Syst.* **72**, 4-15

Papka, R. E., Williams, S., Miller, K. E., Copelin, T., and Puri, P. (1998) CNS location of uterine-related neurons revealed by trans-synaptic tracing with pseudorabies virus and their relation to estrogen receptor- immunoreactive neurons. *Neuroscience* **84**, 935-952

Paton, J. F. (1996a) The ventral medullary respiratory network of the mature mouse studied in a working heart-brainstem preparation. *J.Physiol.(Lond)* **493**, 819-831

Paton, J. F. (1996b) A working heart-brainstem preparation of the mouse. *J.Neurosci.Methods* **65**, 63-68

Paton, J. F. (1999) The Sharpey-Schafer prize lecture: nucleus tractus solitarii: integrating structures. *Exp.Physiol* **84**, 815-833

Paton, J. F., and Kasparov, S. (2000) Sensory channel specific modulation in the nucleus of the solitary tract. *J.Auton.Nerv.Syst.* **80**, 117-129

Paton, J. F. R., Deuchars, J., Wang, S., and Kasparov, S. (2005) Nitroergic modulation in the NTS: implication for cardiovascular function. In *Advances in Vagal Afferent Neurobiology* (Udem, B., and Weinreich, D., eds) pp. 2009-2246, CRC Press, Boca Raton

Paxinos, G., and Watson, C. (2014) *The Rat Brain in Stereotaxic Coordinates. 7th edition*, Elsevier Academic Press, Amsterdam

Petras, J. M., and Cummings, J. F. (1972) Autonomic neurons in the spinal cord of the Rhesus monkey: a correlation of the findings of cytoarchitectonics and sympathectomy with fiber degeneration following dorsal rhizotomy. *J.Comp.Neurol.* **146**, 189-218

Pilowsky, P. M., and Makeham, J. (2001) Juxtacellular labeling of identified neurons: kiss the cells and make them dye. *J Comp Neurol.* **433**, 1-3

Pinault, D. (1996) A novel single-cell staining procedure performed in vivo under electrophysiological control: morpho-functional features of juxtacellularly labeled thalamic cells and other central neurons with biocytin or Neurobiotin. *J Neurosci Methods* **65**, 113-136

Powley, T. L., Berthoud, H. R., Fox, A. P., and Laughton, W. (1992) The dorsal vagal complex forms a sensory-motor lattice: the circuitry of gastrointestinal reflexes. In *Neuroanatomy and physiology of abdominal vagal afferents* (Ritter, S., Ritter, R. C., and Barnes, C. D., eds) pp. 55-79, CRC Press, Bocan Raton

Prechtl, J. C., and Powley, T. L. (1985) Organization and distribution of the rat subdiaphragmatic vagus and associated paraganglia. *J.Comp.Neurol.* **235**, 182-195

Prechtl, J. C., and Powley, T. L. (1990) The fiber composition of the abdominal vagus of the rat. *Anat.Embryol.(Berl)* **181**, 101-115

Pyner, S., and Coote, J. H. (1994) Evidence that sympathetic preganglionic neurones are arranged in target-specific columns in the thoracic spinal cord of the rat. *J Comp Neurol.* **342**, 15-22

Reiner, A., Karten, H. J., Gamlin, P. D. R., and Erichsen, J. T. (1983) Parasympathetic ocular control. Functional subdivisions and circuity of the avian nucleus Edinger-Westphal. *Trends in Neurosciences* **6**, 140-145

Rexed, B. (1952) The cytoarchitectonic organization of the spinal cord in the cat. *J Comp Neurol.* **96**, 414-495

Rexed, B. (1954) A cytoarchitectonic atlas of the spinal cord in the cat. *J Comp Neurol.* **100**, 297-379

Robertson, D., Biaggioni, I., Burnstock, G., Low, P. A., and Paton, J. F. R. (eds.)(2012) *Primer of the Autonomic Nervous System, 3rd edition*, Elsevier, Academic Press, Oxford

Romanovsky, A. A. (ed.)(2018) *Thermoregulation: from Basic Neuroscience to Clinical Neurology, Part I, Handbook of Clinical Neurology Vol 156*, Elsevier, Amsterdam

Roppolo, J. R., Nadelhaft, I., and de Groat, W. C. (1985) The organization of pudendal motoneurons and primary afferent projections in the spinal cord of the rhesus monkey revealed by horseradish peroxidase. *J Comp Neurol* **234**, 475-488

Rossiter, C. D., Norman, W. P., Jain, M., Hornby, P. J., Benjamin, S., and Gillis, R. A. (1990) Control of lower esophageal sphincter pressure by two sites in dorsal motor nucleus of the vagus. *Am.J Physiol* **259**, G899-G906

Rushmer, R. F., and Smith, O. A., Jr. (1959) Cardiac control. *Physiol Rev* **39**, 41-68

Saper, C. B. (1995) Central autonomic system. In *The Rat Nervous System* (Paxinos, G., ed) pp. 107-135, Academic Press, San Diego

Schramm, L. P., Strack, A. M., Platt, K. B., and Loewy, A. D. (1993) Peripheral and central pathways regulating the kidney: a study using pseudorabies virus. *Brain Res.* **616**, 251-262

Schulkin, J., and Sterling, P. (2019) Allostasis: A Brain-Centered, Predictive Mode of Physiological Regulation. *Trends Neurosci* **42**, 740-752

Schulman, H. (2013) Intracellular signaling. In *Fundamental Neuroscience* (Squire, L. R., Berg, D., Bloom, F. E., Du Lac, S., Ghosh, A., and Spitzer, N. C., eds) pp. 189-209, Elsevier Academic Press, Amsterdam

Sly, D. J., Colvill, L., McKinley, M. J., and Oldfield, B. J. (1999) Identification of neural projections from the forebrain to the kidney, using the virus pseudorabies. *J.Auton.Nerv.Syst.* **77**, 73-82

Smith, J. E., Jansen, A. S., Gilbey, M. P., and Loewy, A. D. (1998) CNS cell groups projecting to sympathetic outflow of tail artery: neural circuits involved in heat loss in the rat. *Brain Res.* **786**, 153-164

Sonnenschein, R. R., and Weissman, M. L. (1978) Sympathetic vasomotor outflows to hindlimb muscles of the cat. *Am.J.Physiol.* **235**, H482-H487

Spencer, S. E., Sawyer, W. B., Wada, H., Platt, K. B., and Loewy, A. D. (1990) CNS projections to the pterygopalatine parasympathetic preganglionic neurons in the rat: a retrograde transneuronal viral cell body labeling study. *Brain Res.* **534**, 149-169

Sterling, P., and Eyer, J. (1988) Allostasis: a new paradigm to explain arousal pathology. In *Handbook of Life Stress, Cognition and Health* (Fisher, S., and Reason, J., eds) pp. 629-649, Wiley, New York

Stornetta, R. L., Schreihofer, A. M., Pelaez, N. M., Sevigny, C. P., and Guyenet, P. G. (2001) Preproenkephalin mRNA is expressed by C1 and non-C1 barosensitive bulbospinal neurons in the rostral ventrolateral medulla of the rat. *J Comp Neurol.* **435**, 111-126

Strack, A. M., and Loewy, A. D. (1990) Pseudorabies virus: a highly specific transneuronal cell body marker in the sympathetic nervous system. *J Neurosci* **10**, 2139-2147

Strack, A. M., Sawyer, W. B., Marubio, L. M., and Loewy, A. D. (1988) Spinal origin of sympathetic preganglionic neurons in the rat. *Brain Res.* **455**, 187-191

Strack, A. M., Sawyer, W. B., Hughes, J. H., Platt, K. B., and Loewy, A. D. (1989a) A general pattern of CNS innervation of the sympathetic outflow demonstrated by transneuronal pseudorabies viral infections. *Brain Res.* **491**, 156-162

Strack, A. M., Sawyer, W. B., Platt, K. B., and Loewy, A. D. (1989b) CNS cell groups regulating the sympathetic outflow to adrenal gland as revealed by transneuronal cell body labeling with pseudorabies virus. *Brain Res.* **491**, 274-296

Ter Horst, G. J., Hautvast, R. W., De Jongste, M. J., and Korf, J. (1996) Neuroanatomy of cardiac activity-regulating circuitry: a transneuronal retrograde viral labelling study in the rat. *Eur.J.Neurosci.* **8**, 2029-2041

Vizzard, M. A., Brisson, M., and De Groat, W. C. (2000) Transneuronal labeling of neurons in the adult rat central nervous system following inoculation of pseudorabies virus into the colon. *Cell Tissue Res.* **299**, 9-26

Vizzard, M. A., Erickson, V. L., Card, J. P., Roppolo, J. R., and De Groat, W. C. (1995) Transneuronal labeling of neurons in the adult rat brainstem and spinal cord after injection of pseudorabies virus into the urethra. *J.Comp.Neurol.* **355**, 629-640

Weaver, L. C., and Polosa, C. (1997) Spinal cord circuits providing control of sympathetic preganglionic neurones. In *Control of Autonomic Functions* (Jordan, D., ed) pp. 29-61, Harwood Academic Publishers, Amsterdam

Westerhaus, M. J., and Loewy, A. D. (1999) Sympathetic-related neurons in the preoptic region of the rat identified by viral transneuronal labeling. *J Comp Neurol.* **414**, 361-378

Westerhaus, M. J., and Loewy, A. D. (2001) Central representation of the sympathetic nervous system in the cerebral cortex. *Brain Res.* **903**, 117-127