

SPARC Dataset Citations

Computational modelling of the mechanical behavior of the colon

DOI: 10.26275/duz8-mq3n **Dataset ID:** 44 **Dataset Version:** 2

Citation: Patel, B., Kassab, G., & Gregersen, H. (2019). *Computational modelling of the mechanical behavior of the colon* (Version 2) [Data set]. SPARC Portal. <https://doi.org/10.26275/DUZ8-MQ3N>

Dataset Citations

DOI: doi:10.17504/protocols.io.wzeff3e [Protocol]

Citation: Patel, B. (2019). Simulating colonic tissue mechanics using a structure-based material model in Abaqus v1. <https://doi.org/10.17504/protocols.io.wzeff3e>

DOI: doi:10.1016/j.jmbbm.2017.08.031 [Originating Publication]

Citation: Patel, B., Chen, H., Ahuja, A., Krieger, J. F., Noblet, J., Chambers, S., & Kassab, G. S. (2018). Constitutive modeling of the passive inflation-extension behavior of the swine colon. *Journal of the Mechanical Behavior of Biomedical Materials*, 77, 176â186. <https://doi.org/10.1016/j.jmbbm.2017.08.031>

Chronic interfacing with the autonomic nervous system using carbon nanotube (CNT) yarn electrodes

DOI: 10.26275/t4ng-2zm6 **Dataset ID:** 48 **Dataset Version:** 1

Citation: McCallum, G., Sui, X., Qiu, C., Marmerstein, J., Zheng, Y., E. Eggers, T., Hu, C., Dai, L., & Durand, D. (2020). *Chronic interfacing with the autonomic nervous system using carbon nanotube (CNT) yarn electrodes* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/T4NG-2ZM6>

Dataset Citations

DOI: doi:10.17504/protocols.io.wssfeee [Protocol]

Citation: Glossopharyngeal Nerve Chronic Recording In Anesthetized Rat v1. (2019). <https://doi.org/10.17504/protocols.io.wssfeee>

DOI: doi:10.1038/s41598-017-10639-w [Originating Publication]

Citation: McCallum, G. A., Sui, X., Qiu, C., Marmerstein, J., Zheng, Y., Eggers, T. E., Hu, C., Dai, L., & Durand, D. M. (2017). Chronic interfacing with the autonomic nervous system using carbon nanotube (CNT) yarn electrodes. *Scientific Reports*, 7(1). <https://doi.org/10.1038/s41598-017-10639-w>

Influence of left vagal stimulus pulse parameters on vagal and gastric activity in rat

DOI: 10.26275/qh3q-elj6 **Dataset ID:** 9 **Dataset Version:** 4

Citation: Ward, M., Nowak, T. V., Phillips, R., Tan, Z., & Powley, T. L. (2019). *Influence of left vagal stimulus pulse parameters on vagal and gastric activity in rat* (Version 4) [Data set]. SPARC Portal. <https://doi.org/10.26275/QH3Q-ELJ6>

Dataset Citations

DOI: doi:10.17504/protocols.io.2kugcww [Protocol]

Citation: Ward, M., V Nowak, T., Tan, Z., Rajwa, B., Phillips, R., & L Powley, T. (2019). A simple approach to identify the influence of left vagal stimulus pulse parameters on vagal and gastric electrical activity in rat v1. <https://doi.org/10.17504/protocols.io.2kugcww>

DOI: doi:10.1109/TNSRE.2014.2351271 [Originating Publication]

Citation: Ward, M. P., Qing, K. Y., Otto, K. J., Worth, R. M., John, S. W. M., & Irazoqui, P. P. (2015). A Flexible Platform for Biofeedback-Driven Control and Personalization of Electrical Nerve Stimulation Therapy. *IEEE Transactions on Neural Systems and Rehabilitation Engineering*, 23(3), 475â484. <https://doi.org/10.1109/tnsre.2014.2351271>

DOI: doi:10.1101/2023.08.30.555315 [Citation]

Citation: Wernisch, L., Edwards, T., Berthon, A., Tessier-Lariviere, O., Sarkans, E., Stoukidi, M., Fortier-Poisson, P., Pinkney, M., Thornton, M., Hanley, C., Lee, S., Jennings, J., Appleton, B., Garsed, P., Patterson, B., Buttinger, W., Gonshaw, S., Jakopec, M., Shunmugam, S., â Hewage, E. (2023). Online Bayesian Optimization of Nerve Stimulation. <https://doi.org/10.1101/2023.08.30.555315>

Processed fMRI data of transcutaneous auricular vagus nerve (taVNS) stimulation in humans

DOI: 10.26275/guqw-r3ca **Dataset ID:** 50 **Dataset Version:** 1

Citation: Napadow, V., & Sclocco, R. (2020). *Processed fMRI data of transcutaneous auricular vagus nerve (taVNS) stimulation in humans* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/GUQW-R3CA>

Dataset Citations

DOI: doi:10.17504/protocols.io.9zqh75w [Protocol]

Citation: Napadow, V., Sclocco, R., Napadow, V., & Sclocco, R. (2019). 7T MRI Protocol for response to Respiratory-gated Auricular Vagal Afferent Nerve Stimulation v1. <https://doi.org/10.17504/protocols.io.9zqh75w>

Vagus nerve stimulation promotes gastric emptying by increasing pyloric opening measured with magnetic resonance imaging

DOI: 10.26275/mvwc-fnqm **Dataset ID:** 24 **Dataset Version:** 2

Citation: Lu, K.-H., Cao, J., Oleson, S., Ward, M., Phillips, R., Powley, T. L., Liu, Z., Jaffey, D., & Rajwa, B. (2019). *Vagus nerve stimulation promotes gastric emptying by increasing pyloric opening measured with magnetic resonance imaging* (Version 2) [Data set]. SPARC Portal. <https://doi.org/10.26275/MVWC-FNQM>

Dataset Citations

DOI: doi:10.17504/protocols.io.vwxfe7n [Protocol]

Citation: Lu, K.-H., Liu, Z., & Cao, J. (2019). Contrast-enhanced magnetic resonance imaging of gastric emptying and motility in rats v1. <https://doi.org/10.17504/protocols.io.vwxfe7n>

DOI: doi:10.1111/nmo.13380 [Originating Publication]

Citation: Lu, K. âH., Cao, J., Oleson, S., Ward, M. P., Phillips, R. J., Powley, T. L., & Liu, Z. (2018). Vagus nerve stimulation promotes gastric emptying by increasing pyloric opening measured with magnetic resonance imaging. *Neurogastroenterology & Motility*, 30(10). Portico. <https://doi.org/10.1111/nmo.13380>

Effect of intermittent hypoxia preconditioning in

rats with chronic cervical spinal cord injury – An electrophysiological study

DOI: 10.26275/c4xq-9kl0 Dataset ID: 52 Dataset Version: 1

Citation: Mitchell, G., Gonzalez-Rothi, E., Allen, L., Ciesla, M., Tadjalli, A., & Simon, A. (2020). *Effect of intermittent hypoxia preconditioning in rats with chronic cervical spinal cord injury – An electrophysiological study* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/C4XQ-9KL0>

Dataset Citations

DOI: doi:10.17504/protocols.io.2jpgcmn [Protocol]
Citation: Gonzalez-Rothi, E., Tadjalli, A., Perim, R., & Mitchell, G. (2019). SPARC bilateral terminal phrenic neurophysiology preparation with moderate acute intermittent hypoxia v1. <https://doi.org/10.17504/protocols.io.2jpgcmn>

DOI: doi:10.17504/protocols.io.2j3gcqn [Protocol]
Citation: Gonzalez-Rothi, E., Allen, L., Simon, A., Seven, Y., Ciesla, M., & Mitchell, G. (2019). SPARC Long-term exposure to intermittent hypoxia (or normoxia) using a custom in-cage computer controlled system v1. <https://doi.org/10.17504/protocols.io.2j3gcqn>

Robust 3-Dimensional visualization of human colon enteric nervous system without tissue sectioning

DOI: 10.26275/pzek-91wx Dataset ID: 55 Dataset Version: 1

Citation: Graham, K. D., Huerta-Lopez, S., Sengupta, R., Shenoy, A., Schneider, S., Wright, C. M., Feldman, M., Furth, E., Lemke, A., Wilkins, B. J., Naji, A., Doolin, E., Howard, M., & Heuckeroth, R. (2020). *Robust 3-Dimensional visualization of human colon enteric nervous system without tissue sectioning* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/PZEK-91WX>

Dataset Citations

DOI: doi:10.17504/protocols.io.wyeffte [Protocol]
Citation: Heuckeroth, R., Huerta Lopez, S., Graham, K., & Sengupta, R. (2019). Human colon tissue clearing and Immunohistochemistry v1. <https://doi.org/10.17504/protocols.io.wyeffte>

DOI: doi:10.1242/jcs.261950 [Citation]
Citation: Sorensen, L., Humenick, A., Poon, S. S. B., Han, M. N., Mahdavian, N. S., Rowe, M. C., Hamnett, R., GÃmez-de-Mariscal, E., Neckel, P. H., Saito, A., Mutunduwe, K., Glennan, C., Haase, R., McQuade, R. M., Foong, J. P. P., Brookes, S. J. H., Kaltschmidt, J. A., MuÃ±oz-Barrutia, A., King, S. K., & Rajasekhar, P. (2024). Gut Analysis Toolbox â automating quantitative analysis of enteric neurons. *Journal of Cell Science*, 137(20). <https://doi.org/10.1242/jcs.261950>

Visualizing sympathetic projections in the intact brown adipose tissue depot in the mouse

DOI: 10.26275/ge74-ypxd Dataset ID: 54 Dataset Version: 1

Citation: Lee, S., & Zeltser, L. (2020). *Visualizing sympathetic projections in the intact brown adipose tissue depot in the mouse* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/GE74-YPXD>

Dataset Citations

DOI: doi:10.17504/protocols.io.wqmfdu6 [Protocol]
Citation: Lee, S., & Zeltser, L. (2019). iDisco immunolabeling in brown adipose tissue (BAT) v1.
<https://doi.org/10.17504/protocols.io.wqmfdu6>

Cholera toxin B retrograde tracing from brown adipose tissue and forelimb to the stellate ganglion

DOI: 10.26275/dwzu-xtmj Dataset ID: 56 Dataset Version: 1

Citation: Lee, S., & Zeltser, L. (2020). *Cholera toxin B retrograde tracing from brown adipose tissue and forelimb to the stellate ganglion* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/DWZU-XTMJ>

Dataset Citations

DOI: doi:10.17504/protocols.io.wjrfrm6 [Protocol]
Citation: Lee, S., & Zeltser, L. (2018). Retrograde labeling of brown adipose tissue (BAT)-projecting sympathetic neurons with cholera toxin B (CTB) v1.
<https://doi.org/10.17504/protocols.io.wjrfrm6>

Quantification of Cholera Toxin Subunit Beta (CTb) positive neurons in the coeliac nodose and dorsal root ganglia 1 week after pancreas injection in mice

DOI: 10.26275/xmsp-wwtu Dataset ID: 57 Dataset Version: 1

Citation: Li, R., Jimenez-Gonzalez, M., & Stanley, S. (2020). *Quantification of Cholera Toxin Subunit Beta (CTb) positive neurons in the coeliac nodose and dorsal root ganglia 1 week after pancreas injection in mice* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/XMSP-WWTU>

Dataset Citations

DOI: doi:10.17504/protocols.io.14egnx47pl5d/v1 [Protocol]
Citation: Jimenez Gonzalez, M. (2019). Intrapaneatic injection surgery v1.
<https://doi.org/10.17504/protocols.io.14egnx47pl5d/v1>

Functional neuronal nodose recording from pig- Modulation by myocardial ischemia and variably coupled PVC's

DOI: 10.26275/w4my-puqm Dataset ID: 58 Dataset Version: 1

Citation: Vaseghi, M., Salavtion, S., Yamagochi, N., Hoang, J., Lin, N., Ardell, J., & Armour, J. (2020). *Functional neuronal nodose recording from pig- Modulation by myocardial ischemia and variably coupled PVC's* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/W4MY-PUQM>

Dataset Citations

DOI: doi:10.17504/protocols.io.2i4gcgw [Protocol]
Citation: Ardell, J. (2019). Pig-Neural recording and analysis-workflow v1.
<https://doi.org/10.17504/protocols.io.2i4gcgw>

DOI: doi:10.17504/protocols.io.2ncgdaw [Protocol]
Citation: Vaseghi, M., & Ardell, J. (2019). Pig Nodose Ganglion protocol v1.
<https://doi.org/10.17504/protocols.io.2ncgdaw>

DOI: doi:10.1152/ajpheart.00286.2019 [Originating Publication]
Citation: Salavatian, S., Yamaguchi, N., Hoang, J., Lin, N., Patel, S., Ardell, J. L., Armour, J. A., & Vaseghi, M. (2019). Premature ventricular contractions activate vagal afferents and alter autonomic tone: implications for premature ventricular contraction-induced cardiomyopathy. *American Journal of Physiology-Heart and Circulatory Physiology*, 317(3), H607âH616.
<https://doi.org/10.1152/ajpheart.00286.2019>

Mapping of human gastric enteroendocrine cells

DOI: 10.26275/ppgj-qqp **Dataset ID:** 59 **Dataset Version:** 1

Citation: Fakhry, J., Stebbing, M., Hunne, B., Bayguinov, Y., Ward, S. M., Sasse, K. C., Callaghan, B., McQuade, R. M., & Furness, J. (2020). *Mapping of human gastric enteroendocrine cells* (Version 1) [Data set]. SPARC Portal.
<https://doi.org/10.26275/PPGJ-QQPF>

Dataset Citations

DOI: doi:10.17504/protocols.io.w3tfgnn [Protocol]
Citation: Immunohistochemistry and high resolution microscopy of human gastric enteroendocrine cells v1. (2019). <https://doi.org/10.17504/protocols.io.w3tfgnn>

DOI: doi:10.1007/s00441-018-2957-0 [Originating Publication]
Citation: Fakhry, J., Stebbing, M. J., Hunne, B., Bayguinov, Y., Ward, S. M., Sasse, K. C., Callaghan, B., McQuade, R. M., & Furness, J. B. (2018). Relationships of endocrine cells to each other and to other cell types in the human gastric fundus and corpus. *Cell and Tissue Research*, 376(1), 37â49. <https://doi.org/10.1007/s00441-018-2957-0>

Quantification of the relationship between rat gastric nerve fibers and enteroendocrine cells (EEC)

DOI: 10.26275/mzth-oxbk **Dataset ID:** 21 **Dataset Version:** 2

Citation: Hunne, B., Furness, J., Stebbing, M., McQuade, R. M., & Fakhry, J. (2019). *Quantification of the relationship between rat gastric nerve fibers and enteroendocrine cells (EEC)* (Version 2) [Data set]. SPARC Portal.
<https://doi.org/10.26275/MZTH-OXBK>

Dataset Citations

DOI: doi:10.17504/protocols.io.xz8fp9w [Protocol]
Citation: Hunne, B., Stebbing, M., M McQuade, R., & B Furness, J. (2019). Immunohistochemistry and high resolution microscopy of rat gastric nerve fibers and their relationship with enteroendocrine cells v1. <https://doi.org/10.17504/protocols.io.xz8fp9w>

Quantification of rat gastric enteroendocrine cells

DOI: 10.26275/o9qr-l4x9 **Dataset ID:** 20 **Dataset Version:** 3

Citation: Hunne, B., Furness, J., Stebbing, M., McQuade, R. M., & Fakhry, J.

(2019). *Quantification of rat gastric enteroendocrine cells* (Version 3) [Data set]. SPARC Portal. <https://doi.org/10.26275/O9QR-L4X9>

Dataset Citations

DOI: [doi:10.17504/protocols.io.xeyfjfw](https://doi.org/10.17504/protocols.io.xeyfjfw) [Protocol]
Citation: Hunne, B., Stebbing, M., M. McQuade, R., & B. Furness, J. (2019). Immunohistochemistry and high resolution microscopy of rat gastric enteroendocrine cells v1. <https://doi.org/10.17504/protocols.io.xeyfjfw>

DOI: [doi:10.1007/s00441-019-03029-3](https://doi.org/10.1007/s00441-019-03029-3) [Originating Publication]
Citation: Hunne, B., Stebbing, M. J., McQuade, R. M., & Furness, J. B. (2019). Distributions and relationships of chemically defined enteroendocrine cells in the rat gastric mucosa. *Cell and Tissue Research*, 378(1), 33â48. <https://doi.org/10.1007/s00441-019-03029-3>

Imaging fast neural traffic at fascicular level with electrical impedance tomography - Proof of principle in rat sciatic nerve

DOI: [10.26275/spfh-lx9g](https://doi.org/10.26275/spfh-lx9g) Dataset ID: 62 Dataset Version: 1

Citation: Aristovich, K., Donega, M., Blochet, C., Avery, J., Hannan, S., Chew, D. J., & Holder, D. (2020). *Imaging fast neural traffic at fascicular level with electrical impedance tomography - Proof of principle in rat sciatic nerve* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/SPFH-LX9G>

Dataset Citations

DOI: [doi:10.17504/protocols.io.ww7ffhn](https://doi.org/10.17504/protocols.io.ww7ffhn) [Protocol]
Citation: Aristovich, K., Donega, M., & Holder, D. (2019). EIT data aquisition in rat sciatic nerve using stimulation of tibial and peroneal branches v1. <https://doi.org/10.17504/protocols.io.ww7ffhn>

DOI: [doi:10.1088/1741-2552/aad78e](https://doi.org/10.1088/1741-2552/aad78e) [Originating Publication]
Citation: Aristovich, K., Donega, M., Blochet, C., Avery, J., Hannan, S., Chew, D. J., & Holder, D. (2018). Imaging fast neural traffic at fascicular level with electrical impedance tomography: proof of principle in rat sciatic nerve. *Journal of Neural Engineering*, 15(5), 056025. <https://doi.org/10.1088/1741-2552/aad78e>

Spatial distribution and morphometric characterization of vagal afferents associated with the myenteric plexus of the rat stomach

DOI: [10.26275/wzry-sf7v](https://doi.org/10.26275/wzry-sf7v) Dataset ID: 10 Dataset Version: 3

Citation: Powley, T. L., Phillips, R., Jaffey, D., Rajwa, B., McAdams, J., Baronowsky, E., Chesney, L., Black, D., & Evans, C. (2019). *Spatial distribution and morphometric characterization of vagal afferents associated with the myenteric plexus of the rat stomach* (Version 3) [Data set]. SPARC Portal. <https://doi.org/10.26275/WZRY-SF7V>

Dataset Citations

DOI: doi:10.17504/protocols.io.2ipgcdn [Protocol]

Citation: Powley, T., McAdams, J., & Phillips, R. (2019). High resolution labeling of vagal afferent fibers using Dextran-Biotin with counterstaining v1. <https://doi.org/10.17504/protocols.io.2ipgcdn>

DOI: doi:10.1152/ajpregu.00111.2020 [Citation]

Citation: Tan, Z. T., Ward, M., Phillips, R. J., Zhang, X., Jaffey, D. M., Chesney, L., Rajwa, B., Baronowsky, E. A., McAdams, J., & Powley, T. L. (2021). Stomach region stimulated determines effects on duodenal motility in rats. *American Journal of Physiology-Regulatory, Integrative and Comparative Physiology*, 320(3), R331âR341. <https://doi.org/10.1152/ajpregu.00111.2020>

Spatial distribution and morphometric characterization of vagal afferents (intramuscular arrays (IMAs)) within the longitudinal and circular muscle layers of the rat stomach

DOI: 10.26275/3m8n-0owa **Dataset ID:** 11 **Dataset Version:** 3

Citation: Powley, T., Phillips, R. J., Jaffey, D., Rajwa, B., McAdams, J., Baronowsky, E., Chesney, L., Black, D., Martin, F. N., & Hudson, C. N. (2019). *Spatial distribution and morphometric characterization of vagal afferents (intramuscular arrays (IMAs)) within the longitudinal and circular muscle layers of the rat stomach* (Version 3) [Data set]. SPARC Portal. <https://doi.org/10.26275/3M8N-0OWA>

Dataset Citations

DOI: doi:10.17504/protocols.io.2ipgcdn [Protocol]

Citation: Powley, T., McAdams, J., & Phillips, R. (2019). High resolution labeling of vagal afferent fibers using Dextran-Biotin with counterstaining v1. <https://doi.org/10.17504/protocols.io.2ipgcdn>

DOI: doi:10.1002/cne.23892 [Originating Publication]

Citation: Powley, T. L., Hudson, C. N., McAdams, J. L., Baronowsky, E. A., & Phillips, R. J. (2015). Vagal Intramuscular Arrays: The Specialized Mechanoreceptor Arbors That Innervate the Smooth Muscle Layers of the Stomach Examined in the Rat. *Journal of Comparative Neurology*, 524(4), 713â737. Portico. <https://doi.org/10.1002/cne.23892>

DOI: doi:10.1152/ajpregu.00111.2020 [Citation]

Citation: Tan, Z. T., Ward, M., Phillips, R. J., Zhang, X., Jaffey, D. M., Chesney, L., Rajwa, B., Baronowsky, E. A., McAdams, J., & Powley, T. L. (2021). Stomach region stimulated determines effects on duodenal motility in rats. *American Journal of Physiology-Regulatory, Integrative and Comparative Physiology*, 320(3), R331âR341. <https://doi.org/10.1152/ajpregu.00111.2020>

Spatial distribution and morphometric characterization of vagal efferents associated with the myenteric plexus of the rat stomach

DOI: 10.26275/ukz3-0fao **Dataset ID:** 12 **Dataset Version:** 3

Citation: Powley, T., Phillips, R., Jaffey, D., Rajwa, B., McAdams, J., Baronowsky, E., Chesney, L., Black, D., & Evans, C. (2019). *Spatial distribution and morphometric characterization of vagal efferents associated with the myenteric plexus of the rat stomach* (Version 3) [Data set]. SPARC Portal. <https://doi.org/10.26275/UKZ3-0FAO>

Dataset Citations

DOI: doi:10.17504/protocols.io.2iqgcdw [Protocol]
Citation: Jaffey, D., Powley, T., McAdams, J., & Phillips, R. (2019). High resolution labeling of vagal efferent fibers using Dextran-Biotin with counterstaining v1.
<https://doi.org/10.17504/protocols.io.2iqgcdw>

DOI: doi:10.1038/s41583-021-00544-7 [Citation]
Citation: Kim, M., Heo, G., & Kim, S.-Y. (2022). Neural signalling of gut mechanosensation in ingestive and digestive processes. *Nature Reviews Neuroscience*, 23(3), 135â156.
<https://doi.org/10.1038/s41583-021-00544-7>

DOI: doi:10.1152/ajpregu.00260.2022 [Citation]
Citation: Jaffey, D. M., McAdams, J. L., Baronowsky, E. A., Black, D., & Powley, T. L. (2023). Vagal preganglionic axons arborize in the myenteric plexus into two types: nitrenergic and non-nitrenergic postganglionic motor pools? *American Journal of Physiology-Regulatory, Integrative and Comparative Physiology*, 324(3), R305âR316. <https://doi.org/10.1152/ajpregu.00260.2022>

Feline brainstem neuron extracellular potential recordings

DOI: 10.26275/1upo-xvkt **Dataset ID:** 35 **Dataset Version:** 3

Citation: Morris, K., Horton, K.-K., Segers, L., Nuding, S., Gestreau, C., Alencar, P., Shuman, D., O'Connor, R., Lindsey, B., Bolser, D., Davenport, P., & Pitts, T. (2019). *Feline brainstem neuron extracellular potential recordings (Version 3)* [Data set]. SPARC Portal. <https://doi.org/10.26275/1UPO-XVKT>

Dataset Citations

DOI: doi:10.17504/protocols.io.bci8iuhw [Protocol]
Citation: Segers, L., Morris, K., & Bolser, D. (2020). Morris USF Lab protocol v2.
<https://doi.org/10.17504/protocols.io.bci8iuhw>

DOI: doi:10.3389/fphys.2018.00785 [Originating Publication]
Citation: Horton, K.-K., Segers, L. S., Nuding, S. C., OâConnor, R., Alencar, P. A., Davenport, P. W., Bolser, D. C., Pitts, T., Lindsey, B. G., Morris, K. F., & Gestreau, C. (2018). Central Respiration and Mechanical Ventilation in the Gating of Swallow With Breathing. *Frontiers in Physiology*, 9. <https://doi.org/10.3389/fphys.2018.00785>

DOI: doi:10.1101/2021.02.10.430563 [Citation]
Citation: Bandrowski, A., Grethe, J. S., Pilko, A., Gillespie, T., Pine, G., Patel, B., Surles-Zeigler, M., & Martone, M. E. (2021). SPARC Data Structure: Rationale and Design of a FAIR Standard for Biomedical Research Data. <https://doi.org/10.1101/2021.02.10.430563>

Prototype simulation of undiseased human cardiac ventricular cells

DOI: 10.26275/uztw-z5sc **Dataset ID:** 63 **Dataset Version:** 2

Citation: Clancy, C., & Yang, P.-C. (2020). *Prototype simulation of undiseased human cardiac ventricular cells (Version 2)* [Data set]. SPARC Portal.
<https://doi.org/10.26275/UZTW-Z5SC>

Dataset Citations

DOI: doi:10.17504/protocols.io.xjwfkpe [Protocol]
Citation: clancy, C., & Yang, P.-C. (2019). Undiseased Human Cardiac Ventricular Cells v1.
<https://doi.org/10.17504/protocols.io.xjwfkpe>

DOI: doi:10.1371/journal.pcbi.1002061 [Originating Publication]
Citation: OâHara, T., VirÃ¡g, L., VarrÃ³, A., & Rudy, Y. (2011). Simulation of the Undiseased Human Cardiac Ventricular Action Potential: Model Formulation and Experimental Validation. PLoS Computational Biology, 7(5), e1002061. <https://doi.org/10.1371/journal.pcbi.1002061>

Bilateral recordings of cervical vagus nerve activity in rats

DOI: 10.26275/osy6-dn3o **Dataset ID:** 51 **Dataset Version:** 1

Citation: Ay, I., Helmer, K., Napadow, V., & Monello, C. (2020). *Bilateral recordings of cervical vagus nerve activity in rats* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/OSY6-DN3O>

Dataset Citations

DOI: doi:10.17504/protocols.io.yxhfxj6 [Protocol]
Citation: Napadow, V., Ay, I., & Morello, C. (2019). Recordings of cervical vagus nerve activity v1. <https://doi.org/10.17504/protocols.io.yxhfxj6>

iBAT (interscapular Brown Adipose Tissue) sympathetic innervation circuit pseudorabies viral tracing in reporter mice

DOI: 10.26275/xkoa-oqec **Dataset ID:** 73 **Dataset Version:** 1

Citation: Muenzberg, H., Berthoud, H.-R., Burk, D., Morrison, C. D., Yu, S., Qualls-Creekmore, E., François, M., Zhang, R., Huesing, C., Lee, N., Torres, H., & Saurage, C. (2020). *iBAT (interscapular Brown Adipose Tissue) sympathetic innervation circuit pseudorabies viral tracing in reporter mice* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/XKOA-OQEC>

Dataset Citations

DOI: doi:10.17504/protocols.io.wzuff6w [Protocol]
Citation: Huesing, C., Muenzberg, H., Burk, D., & Torres, H. (2019). iDISCO protocol for whole-mount immunostaining and volume imaging v1. <https://doi.org/10.17504/protocols.io.wzuff6w>

DOI: doi:10.17504/protocols.io.wz3ff8n [Protocol]
Citation: Huesing, C., Torres, H., Burk, D., & Muenzberg, H. (2019). Light sheet microscopy v1. <https://doi.org/10.17504/protocols.io.wz3ff8n>

DOI: doi:10.17504/protocols.io.w2vfge6 [Protocol]
Citation: Pseudorabies Virus (PRV) injection into interscapular brown adipose tissue v1. (2019). <https://doi.org/10.17504/protocols.io.w2vfge6>

Electrophysiology in dog after subcutaneous nerve stimulation

DOI: 10.26275/63lh-hdz5 **Dataset ID:** 49 **Dataset Version:** 1

Citation: Wan, J., Chen, M., Yuan, Y., Wang, Z., Shen, C., Fishbein, M., Chen, Z., Wong, J., Grant, M., Everett, T., & Chen, P.-S. (2020). *Electrophysiology in dog after subcutaneous nerve stimulation* (Version 1) [Data set]. SPARC Portal.

<https://doi.org/10.26275/63LH-HDZ5>

Dataset Citations

DOI: doi:10.1016/j.hrthm.2019.02.027 [Originating Publication]

Citation: Wan, J., Chen, M., Yuan, Y., Wang, Z., Shen, C., Fishbein, M. C., Chen, Z., Wong, J., Grant, M. B., Everett, T. H., & Chen, P.-S. (2019). Antiarrhythmic and proarrhythmic effects of subcutaneous nerve stimulation in ambulatory dogs. *Heart Rhythm*, 16(8), 1251â1260. <https://doi.org/10.1016/j.hrthm.2019.02.027>

DOI: doi:10.17504/protocols.io.bz5wp87e [Citation]

Citation: Subcutaneous nerve stimulation in canine model of persistent atrial fibrillation v1. (2021). <https://doi.org/10.17504/protocols.io.bz5wp87e>

Submandibular ganglion stained by bungarotoxin and nanosensors in mouse

DOI: 10.26275/prjd-jhoc **Dataset ID:** 75 **Dataset Version:** 1

Citation: Xia, J., Yang, H., Mu, M., Duerr, T., Monaghan, J., & Clark, H. (2020). *Submandibular ganglion stained by bungarotoxin and nanosensors in mouse* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/PRJD-JHOC>

Dataset Citations

DOI: doi:10.17504/protocols.io.wxrfm6 [Protocol]

Citation: Staining and imaging of mouse submandibular ganglion by $\hat{\pm}$ -bungarotoxin and nanosensor v1. (2019). <https://doi.org/10.17504/protocols.io.wxrfm6>

Phrenic nerve immunohistochemistry

DOI: 10.26275/nnyt-bqpg **Dataset ID:** 53 **Dataset Version:** 1

Citation: Mitchell, G., Gonzalez-Rothi, E., Bolser, D., Davenport, P. W., Allen, L., Ciesla, M., Seven, Y., Tadjalli, A., Simon, A., & Svetlov, A. (2020). *Phrenic nerve immunohistochemistry* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/NNYT-BQPG>

Dataset Citations

DOI: doi:10.17504/protocols.io.2j3gcqn [Protocol]
Citation: Gonzalez-Rothi, E., Allen, L., Simon, A., Seven, Y., Ciesla, M., & Mitchell, G. (2019). SPARC Long-term exposure to intermittent hypoxia (or normoxia) using a custom in-cage computer controlled system v1. <https://doi.org/10.17504/protocols.io.2j3gcqn>

DOI: doi:10.17504/protocols.io.2kfgctn [Protocol]
Citation: Gonzalez-Rothi, E., Seven, Y., Allen, L., Ciesla, M., & Mitchell, G. (2019). SPARC Adenosine 2A Receptor Immunohistochemistry Protocol in Rat Tissues Labeled with Cholera Toxin B-fragment v1. <https://doi.org/10.17504/protocols.io.2kfgctn>

DOI: doi:10.17504/protocols.io.2kggctw [Protocol]
Citation: Gonzalez-Rothi, E., Seven, Y., Allen, L., Ciesla, M., & Mitchell, G. (2019). SPARC Serotonin 2A Receptor (5-HT2AR) Immunohistochemistry Protocol in Rat Tissues Labeled with Cholera Toxin B-fragment v1. <https://doi.org/10.17504/protocols.io.2kggctw>

DOI: doi:10.17504/protocols.io.2khgct6 [Protocol]
Citation: Gonzalez-Rothi, E., Seven, Y., Allen, L., Ciesla, M., & Mitchell, G. (2019). SPARC Serotonin 2B Receptor (5-HT2BR) Immunohistochemistry Protocol in Rat Tissues Labeled with Cholera Toxin B-fragment v1. <https://doi.org/10.17504/protocols.io.2khgct6>

DOI: doi:10.17504/protocols.io.2kigcqe [Protocol]
Citation: Gonzalez-Rothi, E., Seven, Y., Allen, L., Ciesla, M., & Mitchell, G. (2019). SPARC Serotonin 2B Receptor (5-HT2BR) Immunohistochemistry Protocol in Rat Tissues Labeled with Cholera Toxin B-fragment v1. <https://doi.org/10.17504/protocols.io.2kigcqe>

DOI: doi:10.17504/protocols.io.2kjgcn [Protocol]
Citation: Gonzalez-Rothi, E., Seven, Y., Allen, L., Ciesla, M., & Mitchell, G. (2019). SPARC Serotonin 7 Receptor (5-HT7) Immunohistochemistry Protocol in Rat Tissues Labeled with Cholera Toxin B-fragment v1. <https://doi.org/10.17504/protocols.io.2kjgcn>

DOI: doi:10.17504/protocols.io.2kngcve [Protocol]
Citation: Gonzalez-Rothi, E., Ciesla, M., Allen, L., & Mitchell, G. (2019). SPARC C2 Spinal Cord Hemisection Protocol in Rats v1. <https://doi.org/10.17504/protocols.io.2kngcve>

DOI: doi:10.17504/protocols.io.2kpgcvn [Protocol]
Citation: Allen, L., Ciesla, M., Seven, Y., Gonzalez-Rothi, E., & Pool, G. (2019). SPARC Retrograde Neuroanatomical Tracing of Phrenic Motor Neurons Using Intrapleural Injections of Cholera Toxin B Fragment v1. <https://doi.org/10.17504/protocols.io.2kpgcvn>

Functional recordings from the pig intrinsic cardiac nervous system (ICN)

DOI: 10.26275/owri-mpsx Dataset ID: 28 Dataset Version: 2

Citation: Rajendran, P., Vaseghi, M., & Ardell, J. (2019). *Functional recordings from the pig intrinsic cardiac nervous system (ICN)* (Version 2) [Data set]. SPARC Portal. <https://doi.org/10.26275/OWRI-MPSX>

Dataset Citations

DOI: doi:10.17504/protocols.io.2jugcnw [Protocol]
Citation: Ardell, J. (2019). Pig ICN recording v1. <https://doi.org/10.17504/protocols.io.2jugcnw>

DOI: doi:10.1016/j.ifacol.2023.01.031 [Citation]
Citation: Gee, M. M., Lenhoff, A. M., Schwaber, J. S., Ogunnaike, B. A., & Vadigepalli, R. (2022). Modeling and Analysis of the Intrinsic Cardiac Nervous System in Closed-Loop Cardiovascular Control. IFAC-PapersOnLine, 55(23), 146â147. <https://doi.org/10.1016/j.ifacol.2023.01.031>

Pig vagus nerve stained with Masson's trichrome

DOI: 10.26275/pgr9-bk2e Dataset ID: 82 Dataset Version: 1

Citation: Pelot, N. A., Ezzell, J. A., Goldhagen, G. B., Musselman, E., Cariello, J. E., Clissold, K. A., & Grill, W. M. (2020). Pig vagus nerve stained with Masson's trichrome [Data set]. In *Quantified vagus nerve morphology across species* (Version 1). SPARC Portal. <https://doi.org/10.26275/PGR9-BK2E>

Dataset Citations

DOI: [doi:10.17504/protocols.io.6bqhamw](https://doi.org/10.17504/protocols.io.6bqhamw) [Protocol]
Citation: SPARC_Duke_PelotGrill_OT2-OD025340_PigVagusNerve_Collection_Histology_Microscopy v1. (2019). <https://doi.org/10.17504/protocols.io.6bqhamw>

Rat vagus nerve stained with Masson's trichrome

DOI: 10.26275/z3ab-7j9y **Dataset ID:** 16 **Dataset Version:** 5

Citation: Pelot, N. A., Ezzell, J. A., Goldhagen, G. B., Musselman, E., Cariello, J. E., Clissold, K. A., & Grill, W. M. (2020). *Rat vagus nerve stained with Masson's trichrome* (Version 5) [Data set]. SPARC Portal. <https://doi.org/10.26275/Z3AB-7J9Y>

Dataset Citations

DOI: [doi:10.17504/protocols.io.ww3ffgn](https://doi.org/10.17504/protocols.io.ww3ffgn) [Protocol]
Citation: SPARC_Duke_Grill_OT2-OD025340_RatVagusNerveCollectionHistologyMicroscopy v1. (2019). <https://doi.org/10.17504/protocols.io.ww3ffgn>

DOI: [doi:10.17504/protocols.io.bh4bj8sn](https://doi.org/10.17504/protocols.io.bh4bj8sn) [Protocol]
Citation: SPARC_Duke_PelotGrill_OT2-OD025340_RatVagusNerve_Collection_Histology_Microscopy v2. (2020). <https://doi.org/10.17504/protocols.io.bh4bj8sn>

DOI: [doi:10.3389/fnins.2020.601479](https://doi.org/10.3389/fnins.2020.601479) [Originating Publication]
Citation: Pelot, N. A., Goldhagen, G. B., Cariello, J. E., Musselman, E. D., Clissold, K. A., Ezzell, J. A., & Grill, W. M. (2020). Quantified Morphology of the Cervical and Subdiaphragmatic Vagus Nerves of Human, Pig, and Rat. *Frontiers in Neuroscience*, 14. <https://doi.org/10.3389/fnins.2020.601479>

Characterizing the effect of feeding distension and emetic stimuli on gastric myoelectric activity in ferrets

DOI: 10.26275/boe7-1bms **Dataset ID:** 41 **Dataset Version:** 2

Citation: Nanivadekar, A., Miller, D., Fulton, S., McLaughlin, B., Fisher, L., Yates, B., & Horn, C. (2020). *Characterizing the effect of feeding distension and emetic stimuli on gastric myoelectric activity in ferrets* (Version 2) [Data set]. SPARC Portal. <https://doi.org/10.26275/BOE7-1BMS>

Dataset Citations

DOI: doi:10.17504/protocols.io.6a7hahn [Protocol]
Citation: C Horn, C., M. Miller, D., Fulton, S., J. Yates, B., E. Fisher, L., & C. Nanivadekar, A. (2019). SPARC - Acute surgery and experimentation of the gastrointestinal tract and vagus nerve in the ferret v1. <https://doi.org/10.17504/protocols.io.6a7hahn>

DOI: doi:10.17504/protocols.io.6a8hahw [Protocol]
Citation: C Horn, C., M. Miller, D., Fulton, S., J. Yates, B., E. Fisher, L., & C. Nanivadekar, A. (2019). SPARC - Gastrointestinal myoelectric recordings from the behaving ferret v1. <https://doi.org/10.17504/protocols.io.6a8hahw>

DOI: doi:10.17504/protocols.io.6crhav6 [Protocol]
Citation: C Horn, C., M. Miller, D., Fulton, S., J. Yates, B., E. Fisher, L., & C. Nanivadekar, A. (2019). SPARC - Chronic implantation of gastrointestinal and vagus nerve electrodes in the ferret v1. <https://doi.org/10.17504/protocols.io.6crhav6>

DOI: doi:10.1371/journal.pone.0223279 [Originating Publication]
Citation: Nanivadekar, A. C., Miller, D. M., Fulton, S., Wong, L., Ogren, J., Chitnis, G., McLaughlin, B., Zhai, S., Fisher, L. E., Yates, B. J., & Horn, C. C. (2019). Machine learning prediction of emesis and gastrointestinal state in ferrets. PLOS ONE, 14(10), e0223279. <https://doi.org/10.1371/journal.pone.0223279>

Distribution of nitregic cholinergic and all myenteric plexus neurons

DOI: 10.26275/0y4e-eskx **Dataset ID:** 36 **Dataset Version:** 4

Citation: Heredia, D., Gould, T., & Smith, T. (2020). *Distribution of nitregic cholinergic and all myenteric plexus neurons* (Version 4) [Data set]. SPARC Portal. <https://doi.org/10.26275/0Y4E-ESKX>

Dataset Citations

DOI: doi:10.17504/protocols.io.xz6fp9e [Protocol]
Citation: Heredia, D., & Smith, T. (2019). Dissection and fixation of murine colonic tissue for myenteric plexus visualization v1. <https://doi.org/10.17504/protocols.io.xz6fp9e>

DOI: doi:10.1152/ajpgi.00252.2018 [Originating Publication]
Citation: Gould, T. W., Swope, W. A., Heredia, D. J., Corrigan, R. D., & Smith, T. K. (2019). Activity within specific enteric neurochemical subtypes is correlated with distinct patterns of gastrointestinal motility in the murine colon. American Journal of Physiology-Gastrointestinal and Liver Physiology, 317(2), G210âG221. <https://doi.org/10.1152/ajpgi.00252.2018>

Immediate early gene (IEG) mapping of spinal cord neurons activated by cystometry induced micturition in rat

DOI: 10.26275/jg3k-z5qm **Dataset ID:** 88 **Dataset Version:** 1

Citation: Keast, J., Osborne, P., Wiedmann, N., & Wong, A. W. (2020). *Immediate early gene (IEG) mapping of spinal cord neurons activated by cystometry induced micturition in rat* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/JG3K-Z5QM>

Dataset Citations

DOI: doi:10.17504/protocols.io.bakxicxn [Protocol]
Citation: R Keast, J., B Osborne, P., & Wiedmann, N. (2019). Immediate Early Gene (IEG) mapping of spinal cord neurons activated by cystometry-induced micturition in rats [keast-002] v1. <https://doi.org/10.17504/protocols.io.bakxicxn>

DOI: doi:10.1002/cne.24949 [Originating Publication]
Citation: Wiedmann, N. M., Wong, A. W., Keast, J. R., & Osborne, P. B. (2020). Sex differences in cFos and EGR1/Zif268 activity maps of rat sacral spinal cord following cystometry-induced micturition. *Journal of Comparative Neurology*, 529(2), 311-326. Portico. <https://doi.org/10.1002/cne.24949>

Quantified morphology of the pig vagus nerve with anti-fibronectin

DOI: 10.26275/8pc2-rhu2 **Dataset ID:** 89 **Dataset Version:** 1

Citation: Pelot, N. A., Ezzell, J. A., Goldhagen, G. B., Clissold, K. A., & Grill, W. M. (2020). *Quantified morphology of the pig vagus nerve with anti-fibronectin* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/8PC2-RHU2>

Dataset Citations

DOI: doi:10.17504/protocols.io.bfwtipen [Protocol]
Citation: SPARC_Duke_PelotGrill_OT2-OD025340_PigVagusNerve_FibronectinIF_Morphology v1. (2020). <https://doi.org/10.17504/protocols.io.bfwtipen>

Quantified morphology of the rat vagus nerve

DOI: 10.26275/ilb9-0e2a **Dataset ID:** 60 **Dataset Version:** 4

Citation: Pelot, N. A., Goldhagen, G. B., Cariello, J. E., & Grill, W. M. (2020). *Quantified morphology of the rat vagus nerve* (Version 4) [Data set]. SPARC Portal. <https://doi.org/10.26275/ILB9-0E2A>

Dataset Citations

DOI: doi:10.17504/protocols.io.y6hfzb6 [Protocol]
Citation: SPARC_Duke_PelotGrill_OT2-OD025340_RatVagusNerve_Morphology v1. (2019). <https://doi.org/10.17504/protocols.io.y6hfzb6>

DOI: doi:10.1088/1741-2552/ac36e2 [Citation]
Citation: Eiber, C. D., Payne, S. C., Biscola, N. P., Havton, L. A., Keast, J. R., Osborne, P. B., & Fallon, J. B. (2021). Computational modelling of nerve stimulation and recording with peripheral visceral neural interfaces. *Journal of Neural Engineering*, 18(6), 066020. <https://doi.org/10.1088/1741-2552/ac36e2>

DOI: doi:10.12688/f1000research.73492.1 [Citation]
Citation: Quey, R., Schiefer, M. A., Kiran, A., & Patel, B. (2021). KnowMore: an automated knowledge discovery tool for the FAIR SPARC datasets. *F1000Research*, 10, 1132. <https://doi.org/10.12688/f1000research.73492.1>

DOI: doi:10.1101/2021.08.08.455581 [Citation]
Citation: Quey, R., Schiefer, M. A., Kiran, A., & Patel, B. (2021). KnowMore: an automated knowledge discovery tool for the FAIR SPARC datasets. <https://doi.org/10.1101/2021.08.08.455581>

DOI: doi:10.3389/fnins.2020.601479 [Originating Publication]
Citation: Pelot, N. A., Goldhagen, G. B., Cariello, J. E., Musselman, E. D., Clissold, K. A., Ezzell, J. A., & Grill, W. M. (2020). Quantified Morphology of the Cervical and Subdiaphragmatic Vagus Nerves of Human, Pig, and Rat. *Frontiers in Neuroscience*, 14. <https://doi.org/10.3389/fnins.2020.601479>

Human vagus nerve stained with Masson's trichrome

DOI: 10.26275/sydt-lkiw Dataset ID: 61 Dataset Version: 3

Citation: Pelot, N. A., Ezzell, J. A., Goldhagen, G. B., Musselman, E., Cariello, J. E., Clissold, K. A., & Grill, W. M. (2020). *Human vagus nerve stained with Masson's trichrome* (Version 3) [Data set]. SPARC Portal. <https://doi.org/10.26275/SYDT-LKIW>

Dataset Citations

DOI: doi:10.17504/protocols.io.bh4cj8sw [Protocol]
Citation: SPARC_Duke_PelotGrill_OT2-OD025340_HumanVagusNerve_Collection_Histology_Microscopy v2. (2020).
<https://doi.org/10.17504/protocols.io.bh4cj8sw>

DOI: doi:10.3389/fnins.2020.601479 [Originating Publication]
Citation: Pelot, N. A., Goldhagen, G. B., Cariello, J. E., Musselman, E. D., Clissold, K. A., Ezzell, J. A., & Grill, W. M. (2020). Quantified Morphology of the Cervical and Subdiaphragmatic Vagus Nerves of Human, Pig, and Rat. *Frontiers in Neuroscience*, 14.
<https://doi.org/10.3389/fnins.2020.601479>

Quantified morphology of the pig vagus nerve

DOI: 10.26275/maq2-eii4 Dataset ID: 64 Dataset Version: 4

Citation: Pelot, N. A., Goldhagen, G. B., Cariello, J. E., & Grill, W. M. (2020). *Quantified morphology of the pig vagus nerve* (Version 4) [Data set]. SPARC Portal. <https://doi.org/10.26275/MAQ2-EII4>

Dataset Citations

DOI: doi:10.17504/protocols.io.6bvhan6 [Protocol]
Citation: SPARC_Duke_PelotGrill_OT2-OD025340_PigVagusNerve_Morphology v1. (2019).
<https://doi.org/10.17504/protocols.io.6bvhan6>

DOI: doi:10.1088/1741-2552/acda64 [Citation]
Citation: Musselman, E. D., Pelot, N. A., & Grill, W. M. (2023). Validated computational models predict vagus nerve stimulation thresholds in preclinical animals and humans. *Journal of Neural Engineering*, 20(3), 036032. <https://doi.org/10.1088/1741-2552/acda64>

DOI: doi:10.12688/f1000research.73492.1 [Citation]
Citation: Quey, R., Schiefer, M. A., Kiran, A., & Patel, B. (2021). KnowMore: an automated knowledge discovery tool for the FAIR SPARC datasets. *F1000Research*, 10, 1132.
<https://doi.org/10.12688/f1000research.73492.1>

DOI: doi:10.1038/s41467-024-51709-8 [Citation]
Citation: Hussain, M. A., Grill, W. M., & Pelot, N. A. (2024). Highly efficient modeling and optimization of neural fiber responses to electrical stimulation. *Nature Communications*, 15(1).
<https://doi.org/10.1038/s41467-024-51709-8>

DOI: doi:10.1101/2021.08.08.455581 [Citation]
Citation: Quey, R., Schiefer, M. A., Kiran, A., & Patel, B. (2021). KnowMore: an automated knowledge discovery tool for the FAIR SPARC datasets.
<https://doi.org/10.1101/2021.08.08.455581>

DOI: doi:doi.org/10.3389/fnins.2020.601479 [Originating Publication]
Citation: CITATION[doi.org/10.3389/fnins.2020.601479]

Morphometric analysis of the abdominal vagus nerve in rats

DOI: 10.26275/ilkm-9f8r Dataset ID: 90 Dataset Version: 1

Citation: Havton, L. A., Biscola, N., Grill, W. M., Pelot, N. A., Powley, T., & Ward, M. (2020). *Morphometric analysis of the abdominal vagus nerve in rats* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/ILKM-9F8R>

Dataset Citations

DOI: doi:10.17504/protocols.io.xpfxmpn [Protocol]
Citation: Biscola, N., & Havton, L. (2019). Nerve tissue processing for transmission electron microscopy (TEM) v1. <https://doi.org/10.17504/protocols.io.xpfxmpn>

A multi-scale model of cardiac electrophysiology

DOI: 10.26275/tv7g-o8ff Dataset ID: 23 Dataset Version: 2

Citation: Clancy, C., & Yang, P.-C. (2020). *A multi-scale model of cardiac electrophysiology* (Version 2) [Data set]. SPARC Portal. <https://doi.org/10.26275/TV7G-O8FF>

Dataset Citations

DOI: doi:10.17504/protocols.io.5nkg5cw [Protocol]
Citation: clancy, C., not provided, P.-C., & Aghasafari, P. (2019). A multi-scale model of cardiac electrophysiology v1. <https://doi.org/10.17504/protocols.io.5nkg5cw>

DOI: doi:10.1371/journal.pcbi.1006856 [Originating Publication]
Citation: Yang, P.-C., Purawat, S., leong, P. U., Jeng, M.-T., DeMarco, K. R., Vorobyov, I., McCulloch, A. D., Altintas, I., Amaro, R. E., & Clancy, C. E. (2019). A demonstration of modularity, reuse, reproducibility, portability and scalability for modeling and simulation of cardiac electrophysiology using Kepler Workflows. *PLOS Computational Biology*, 15(3), e1006856. <https://doi.org/10.1371/journal.pcbi.1006856>

Functional neuronal nodose recording from pig - Cardiac field chemical and mechanical stimulation

DOI: 10.26275/bjp1-ppqo Dataset ID: 27 Dataset Version: 2

Citation: Vaseghi, M., Ardell, J. L., Shivkumar, K., & Salavatian, S. (2020). *Functional neuronal nodose recording from pig - Cardiac field chemical and mechanical stimulation* (Version 2) [Data set]. SPARC Portal. <https://doi.org/10.26275/BJP1-PPQO>

Dataset Citations

DOI: doi:10.17504/protocols.io.2ncgdaw [Protocol]
Citation: Vaseghi, M., & Ardell, J. (2019). Pig Nodose Ganglion protocol v1. <https://doi.org/10.17504/protocols.io.2ncgdaw>

Pig vagus nerve TH (tyrosine hydroxylase) and ChAT (choline acetyltransferase) positive fibers

DOI: 10.26275/dap3-ckep Dataset ID: 97 Dataset Version: 1

Citation: Pelot, N. A., Ezzell, J. A., Cariello, J. E., Goldhagen, G. B., Clissold, K. A., & Grill, W. M. (2021). *Pig vagus nerve TH (tyrosine hydroxylase) and ChAT (choline acetyltransferase) positive fibers* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/DAP3-CKEP>

Dataset Citations

DOI: doi:10.17504/protocols.io.6hehb3e [Protocol]
Citation: Ashley Ezzell, J., A. Pelot, N., A. Clissold, K., & M. Grill, W. (2019). SPARC_Duke_Grill_OT2-OD025340_VagusNerve_IHC_TH v1. <https://doi.org/10.17504/protocols.io.6hehb3e>

DOI: doi:10.17504/protocols.io.6hfhb3n [Protocol]
Citation: Ashley Ezzell, J., A. Pelot, N., A. Clissold, K., & M. Grill, W. (2019). SPARC_Duke_Grill_OT2-OD025340_VagusNerve_IHC_ChAT v1. <https://doi.org/10.17504/protocols.io.6hfhb3n>

DOI: doi:10.1088/1741-2552/ab7ad4 [Originating Publication]
Citation: Settell, M. L., Pelot, N. A., Knudsen, B. E., Dingle, A. M., McConico, A. L., Nicolai, E. N., Trevathan, J. K., Ezzell, J. A., Ross, E. K., Gustafson, K. J., Shoffstall, A. J., Williams, J. C., Zeng, W., Poore, S. O., Populin, L. C., Suminski, A. J., Grill, W. M., & Ludwig, K. A. (2020). Functional vagotomy in the cervical vagus nerve of the domestic pig: implications for the study of vagus nerve stimulation. *Journal of Neural Engineering*, 17(2), 026022. <https://doi.org/10.1088/1741-2552/ab7ad4>

DOI: doi:10.1088/1741-2552/ac01ff [Citation]
Citation: Settell, M. L., Pelot, N. A., Knudsen, B. E., Dingle, A. M., McConico, A. L., Nicolai, E. N., Trevathan, J. K., Ezzell, J. A., Ross, E. K., Gustafson, K. J., Shoffstall, A. J., Williams, J. C., Zeng, W., Poore, S. O., Populin, L. C., Suminski, A. J., Grill, W. M., & Ludwig, K. A. (2021). Corrigendum: Functional vagotomy in the cervical vagus nerve of the domestic pig: implications for the study of vagus nerve stimulation (2020 J. Neural Eng. 17 026022). *Journal of Neural Engineering*, 18(4), 049501. <https://doi.org/10.1088/1741-2552/ac01ff>

Human islet microvasculature analysis

DOI: 10.26275/fcrd-lbid **Dataset ID:** 43 **Dataset Version:** 5

Citation: Campbell-Thompson, M., Butterworth, E., Carty, K., Nasif, L., & Peñaloza, J. (2021). *Human islet microvasculature analysis* (Version 5) [Data set]. SPARC Portal. <https://doi.org/10.26275/FCRD-LBID>

Dataset Citations

DOI: doi:10.17504/protocols.io.wxbffin [Protocol]
Citation: Peñaloza, J., & Campbell-Thompson, M. (2019). Human Islet Microvasculature Image Processing v1. <https://doi.org/10.17504/protocols.io.wxbffin>

DOI: doi:10.17504/protocols.io.y3tfynn [Protocol]
Citation: Campbell-Thompson, M., Butterworth Hosaka, E., & N Carty, K. (2019). Human Islet Microvasculature Immunofluorescence in Optically Cleared Samples v1. <https://doi.org/10.17504/protocols.io.y3tfynn>

DOI: doi:10.17504/protocols.io.9gbh3sn [Protocol]
Citation: Human Pancreas PACT Optical Clearing and High Resolution 3D Microscopy v1. (2019). <https://doi.org/10.17504/protocols.io.9gbh3sn>

DOI: doi:10.17504/protocols.io.bjfkj6 [Protocol]
Citation: Vesselucida 360 Protocol for Segmenting and Analyzing Human Islet Microvasculature v1. (2020). <https://doi.org/10.17504/protocols.io.bjfkj6>

Immunohistochemical classification of sensory

and autonomic neurons projecting to the lower urinary tract in rats

DOI: 10.26275/gdot-t59p **Dataset ID:** 106 **Dataset Version:** 1

Citation: Keast, J., Osborne, P., Wong, A. W., Hunter, N., Morrison, V., & Richardson, E. (2021). *Immunohistochemical classification of sensory and autonomic neurons projecting to the lower urinary tract in rats* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/GDOT-T59P>

Dataset Citations

DOI: doi:10.17504/protocols.io.w3gfgjw [Protocol]
Citation: R Keast, J., & B Osborne, P. (2019). Immunohistochemical classification of sensory and autonomic neurons projecting to the lower urinary tract in rats [keast-001] v1. <https://doi.org/10.17504/protocols.io.w3gfgjw>

Micro Computed Tomography (Micro-CT) imaging of iodine-stained rat stomachs from full to empty

DOI: 10.26275/jl5t-xfgu **Dataset ID:** 107 **Dataset Version:** 1

Citation: Powley, T. L., Jaffey, D., Chesney, L., McAdams, J., & Rajwa, B. (2021). *Micro Computed Tomography (Micro-CT) imaging of iodine-stained rat stomachs from full to empty* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/JL5T-XFGU>

Dataset Citations

DOI: doi:10.17504/protocols.io.95ih84e [Protocol]
Citation: Micro-CT imaging of iodine-stained rat stomach v1. (2019). <https://doi.org/10.17504/protocols.io.95ih84e>

Imaging in vivo acetylcholine release in the peripheral nervous system with a fluorescent nanosensor in mice

DOI: 10.26275/w027-cisv **Dataset ID:** 108 **Dataset Version:** 1

Citation: Xia, J., Yang, H., Mu, M., Monaghan, J., & Clark, H. (2021). *Imaging in vivo acetylcholine release in the peripheral nervous system with a fluorescent nanosensor in mice* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/W027-CISV>

Dataset Citations

DOI: doi:10.17504/protocols.io.bmmxk47n [Protocol]
Citation: In vivo imaging of acetylcholine release in the peripheral nervous system with a fluorescent nanosensor v1. (2020). <https://doi.org/10.17504/protocols.io.bmmxk47n>

DOI: doi:10.1101/2020.07.06.189696 [Originating Publication]
Citation: Xia, J., Yang, H., Mu, M., Micovic, N., Poskanzer, K. E., Monaghan, J. R., & Clark, H. A. (2020). A DNA-based optical nanosensor for in vivo imaging of acetylcholine in the peripheral nervous system. <https://doi.org/10.1101/2020.07.06.189696>

Spatial mapping and contextualization of axon

subtypes innervating the long bones of C3H and B6 mice

DOI: 10.26275/6xtv-zfpc **Dataset ID:** 109 **Dataset Version:** 2

Citation: Lorenz, M., Brazill, J. M., Beeve, A., Shen, I., & Scheller, E. L. (2021). *Spatial mapping and contextualization of axon subtypes innervating the long bones of C3H and B6 mice* (Version 2) [Data set]. SPARC Portal. <https://doi.org/10.26275/6XTV-ZFPC>

Dataset Citations

DOI: doi:10.17504/protocols.io.bqu2mwye [Protocol]
Citation: Spatial mapping and contextualization of axon subtypes innervating the long bones of C3H and B6 mice v1. (2020). <https://doi.org/10.17504/protocols.io.bqu2mwye>

DOI: doi:10.1101/2020.09.18.303958 [Originating Publication]
Citation: Lorenz, M. R., Brazill, J. M., Beeve, A., Shen, I., & Scheller, E. L. (2020). A neuroskeletal atlas of the mouse limb. <https://doi.org/10.1101/2020.09.18.303958>

DOI: doi:10.1371/journal.pone.0279825 [Originating Publication]
Citation: Gupta, Y., Costa, C., Pinho, E., A. Bastião Silva, L., & Heintzmann, R. (2022). IMAGE-IN: Interactive web-based multidimensional 3D visualizer for multi-modal microscopy images. PLOS ONE, 17(12), e0279825. <https://doi.org/10.1371/journal.pone.0279825>

MicroCT imaging of rat stomach vasculature with Microfil MV-122

DOI: 10.26275/zxe9-o3ss **Dataset ID:** 121 **Dataset Version:** 1

Citation: Powley, T. L., Jaffey, D., Chesney, L., McAdams, J., & Rajwa, B. (2021). *MicroCT imaging of rat stomach vasculature with Microfil MV-122* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/ZXE9-O3SS>

Dataset Citations

DOI: doi:10.17504/protocols.io.bafnibme [Protocol]
Citation: Micro-CT imaging of rat stomach vasculature v1. (2019). <https://doi.org/10.17504/protocols.io.bafnibme>

Functional mapping of the stomach neural circuitry - gastric electrical stimulation (GES) evoked duodenal motility in rats

DOI: 10.26275/rtzw-x9u4 **Dataset ID:** 123 **Dataset Version:** 1

Citation: Tan, Z. T., Ward, M., Phillips, R., Zhang, X., Jaffey, D., Chesney, L., Rajwa, B., Baronowsky, E. A., McAdams, J. L., & Powley, T. L. (2021). *Functional mapping of the stomach neural circuitry - gastric electrical stimulation (GES) evoked duodenal motility in rats* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/RTZW-X9U4>

Dataset Citations

DOI: doi:10.17504/protocols.io.2irgcd6 [Protocol]
Citation: Powley, T., Tan, Z., & Ward, M. (2019). Measurement of duodenal motility using implanted strain gauges v1. <https://doi.org/10.17504/protocols.io.2irgcd6>

DOI: doi:10.1152/ajpregu.00111.2020 [Citation]
Citation: Tan, Z. T., Ward, M., Phillips, R. J., Zhang, X., Jaffey, D. M., Chesney, L., Rajwa, B., Baronowsky, E. A., McAdams, J., & Powley, T. L. (2021). Stomach region stimulated determines effects on duodenal motility in rats. *American Journal of Physiology-Regulatory, Integrative and Comparative Physiology*, 320(3), R331âR341. <https://doi.org/10.1152/ajpregu.00111.2020>

Chemogenetic iBAT (interscapular brown adipose tissue)-specific sympathetic stimulation and e-mitter implant in mice

DOI: 10.26275/tuof-9odl Dataset ID: 127 Dataset Version: 1

Citation: Huesing, C., Lee, N., zhang, rui, & Muenzberg, H. (2021). *Chemogenetic iBAT (interscapular brown adipose tissue)-specific sympathetic stimulation and e-mitter implant in mice* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/TUOF-9ODL>

Dataset Citations

DOI: doi:10.17504/protocols.io.bh3tj8nn [Protocol]
Citation: Bilateral Adeno-associated virus (AAV) injection into interscapular brown adipose tissue v1. (2020). <https://doi.org/10.17504/protocols.io.bh3tj8nn>

DOI: doi:10.17504/protocols.io.bpzbmp2n [Protocol]
Citation: Lee, N. (2020). Abdominal Emitter Implantation v1. <https://doi.org/10.17504/protocols.io.bpzbmp2n>

Chemogenetic whole-body and iBAT (interscapular brown adipose tissue) -specific sympathetic stimulation in anesthetized mice

DOI: 10.26275/pidf-15l3 Dataset ID: 128 Dataset Version: 1

Citation: Muenzberg, H., Huesing, C., & Lee, N. (2021). *Chemogenetic whole-body and iBAT (interscapular brown adipose tissue) -specific sympathetic stimulation in anesthetized mice* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/PIDF-15L3>

Dataset Citations

DOI: doi:10.17504/protocols.io.bh3tj8nn [Protocol]
Citation: Bilateral Adeno-associated virus (AAV) injection into interscapular brown adipose tissue v1. (2020). <https://doi.org/10.17504/protocols.io.bh3tj8nn>

Gene expression profile of interscapular brown adipose tissue (iBAT) and inguinal white adipose tissue (iWAT) whole ganglia sequencing in mice

DOI: 10.26275/m9ti-0pbj Dataset ID: 131 Dataset Version: 1

Citation: Muenzberg, H., Berthoud, H.-R., Yu, S., zhang, rui, Huesing, C., Lee, N., Carmouche, R., Webb, S., & Newman, S. (2021). *Gene expression profile of interscapular brown adipose tissue (iBAT) and inguinal white adipose tissue (iWAT)*

whole ganglia sequencing in mice (Version 1) [Data set]. SPARC Portal.
<https://doi.org/10.26275/M9TI-0PBJ>

Dataset Citations

DOI: doi:10.17504/protocols.io.98uh9ww [Protocol]
Citation: Zhang, R., Huesing, C., & Muenzberg, H. (2019). RNA extraction_Trizol method_Protocol v1. <https://doi.org/10.17504/protocols.io.98uh9ww>

DOI: doi:10.17504/protocols.io.baagiabw [Protocol]
Citation: Zhang, R., & Muenzberg, H. (2019). Sympathetic chain ganglia dissection_Protocol v1. <https://doi.org/10.17504/protocols.io.baagiabw>

Retrograde tracing of interscapular brown adipose tissue (iBAT) specific sympathetic neurons in mice - virus and reporter testing

DOI: 10.26275/pkgd-bopz **Dataset ID:** 133 **Dataset Version:** 1

Citation: Muenzberg, H., Huesing, C., & François, M. (2021). *Retrograde tracing of interscapular brown adipose tissue (iBAT) specific sympathetic neurons in mice - virus and reporter testing* (Version 1) [Data set]. SPARC Portal.
<https://doi.org/10.26275/PKGD-BOPZ>

Dataset Citations

DOI: doi:10.17504/protocols.io.bh3tj8nn [Protocol]
Citation: Bilateral Adeno-associated virus (AAV) injection into interscapular brown adipose tissue v1. (2020). <https://doi.org/10.17504/protocols.io.bh3tj8nn>

Acquisition of single neurons and regional neuronal samples from the porcine right atrial ganglionic plexus (RAGP) through laser capture microdissection

DOI: 10.26275/56h4-ypua **Dataset ID:** 137 **Dataset Version:** 1

Citation: Moss, A., Robbins, S., Achanta, S., Nieves, S., Turick, S., Hanna, P., Ardell, J., Shivkumar, K., Schwaber, J., & Vadigepalli, R. (2021). *Acquisition of single neurons and regional neuronal samples from the porcine right atrial ganglionic plexus (RAGP) through laser capture microdissection* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/56H4-YPUA>

Dataset Citations

DOI: doi:10.21203/rs.3.pex-928/v1 [Citation]
Citation: Robbins, S., Vadigepalli, R., & Schwaber, J. (2021). Cryosectioning, block face imaging and Nissl staining fluorescently labeled pig heart. <https://doi.org/10.21203/rs.3.pex-928/v1>

DOI: doi:10.21203/rs.3.pex-927/v1 [Citation]
Citation: Robbins, S., Achanta, S., & Vadigepalli, R. (2021). Laser Capture Microdissection (LCM) and 3D Sample Tracking Protocol. <https://doi.org/10.21203/rs.3.pex-927/v1>

DOI: doi:10.1101/2020.07.29.227090 [Citation]
Citation: Moss, A., Robbins, S., Achanta, S., Kuttippurathu, L., Turick, S., Nieves, S., Hanna, P., Smith, E. H., Hoover, D. B., Chen, J., Cheng, Z. (Jack), Ardell, J. L., Shivkumar, K., Schwaber, J. S., & Vadigepalli, R. (2020). A spatially-tracked single cell transcriptomics map of neuronal networks in the intrinsic cardiac nervous system. <https://doi.org/10.1101/2020.07.29.227090>

TRAP-SEQ (Translating Ribosome Affinity Purification followed by RNA sequencing) of interscapular brown adipose tissue (iBAT)-related ganglia from 7-day cold and warm treated mice

DOI: 10.26275/ckgb-5ewo Dataset ID: 140 Dataset Version: 1

Citation: Muenzberg, H., Salbaum, M., Berthoud, H.-R., Yu, S., zhang, rui, Huesing, C., Lee, N., Carmouche, R., Webb, S., & Newman, S. (2021). *TRAP-SEQ (Translating Ribosome Affinity Purification followed by RNA sequencing) of interscapular brown adipose tissue (iBAT)- related ganglia from 7-day cold and warm treated mice* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/CKGB-5EWO>

Dataset Citations

DOI: doi:10.17504/protocols.io.babtiann [Protocol]
Citation: Zhang, R. (2019). TRAP-SEQ_Sympathetic chain ganglia_Protocol v1. <https://doi.org/10.17504/protocols.io.babtiann>

Optogenetic stimulation prevents lipopolysaccharide induced TNFa production

DOI: 10.26275/advv-1awo Dataset ID: 143 Dataset Version: 1

Citation: Murray, K., Barboza, M., Brust-Mascher, I., & Reardon, C. (2021). *Optogenetic stimulation prevents lipopolysaccharide induced TNFa production* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/ADV-1AWO>

Dataset Citations

DOI: doi:10.17504/protocols.io.wwbfffan [Protocol]
Citation: Optogenetic Stimulation of superior mesenteric ganglion in a model of septic shock v1. (2019). <https://doi.org/10.17504/protocols.io.wwbfffan>

Effects of cystotomy on the feline urinary bladder

DOI: 10.26275/imbg-0okx Dataset ID: 145 Dataset Version: 1

Citation: Damaser, M., Bourbeau, D., Majerus, S., McAdams, I., Abelson, B., Rietsch, A., & Hanzlicek, B. (2022). *Effects of cystotomy on the feline urinary bladder* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/IMBG-0OKX>

Dataset Citations

DOI: doi:10.17504/protocols.io.bfy9jpz6 [Protocol]
Citation: SPARC Cat surgery Day 0 v1. (2020). <https://doi.org/10.17504/protocols.io.bfy9jpz6>

DOI: doi:10.17504/protocols.io.bfzajp2e [Protocol]
Citation: SPARC Cat - Sham Control Chronic Cat 1, Day 0 v1. (2020).
<https://doi.org/10.17504/protocols.io.bfzajp2e>

DOI: doi:10.17504/protocols.io.bfzajp2w [Protocol]
Citation: SPARC Cat - Sham Control Chronic Cat 2, Day 0 v1. (2020).
<https://doi.org/10.17504/protocols.io.bfzajp2w>

DOI: doi:10.17504/protocols.io.bfzdjp26 [Protocol]
Citation: SPARC Cat - Sham Control Chronic Cat 3, Day 0 v1. (2020).
<https://doi.org/10.17504/protocols.io.bfzdjp26>

DOI: doi:10.17504/protocols.io.bfzhjp36 [Protocol]
Citation: SPARC Cat - Sham Control Chronic Cat 1, Day 14 v1. (2020).
<https://doi.org/10.17504/protocols.io.bfzhjp36>

DOI: doi:10.17504/protocols.io.bfzjip4e [Protocol]
Citation: SPARC Cat - Sham Control Chronic Implant Cat 4, Day 0 v1. (2020).
<https://doi.org/10.17504/protocols.io.bfzjip4e>

DOI: doi:10.17504/protocols.io.bfznjp5e [Protocol]
Citation: SPARC Cat - Sham Control Chronic Cat 2, Day 14 v1. (2020).
<https://doi.org/10.17504/protocols.io.bfznjp5e>

DOI: doi:10.17504/protocols.io.bfzjp5n [Protocol]
Citation: SPARC Cat - Sham Control Chronic Cat 3, Day 14 v1. (2020).
<https://doi.org/10.17504/protocols.io.bfzjp5n>

DOI: doi:10.17504/protocols.io.bfzrjp56 [Protocol]
Citation: SPARC Cat - Sham Control Chronic Implant Cat 4, Day 14 v1. (2020).
<https://doi.org/10.17504/protocols.io.bfzrjp56>

DOI: doi:10.17504/protocols.io.bfztjp6n [Protocol]
Citation: SPARC Cat - Sham Control Chronic Cat 1 Day 30 v1. (2020).
<https://doi.org/10.17504/protocols.io.bfztjp6n>

DOI: doi:10.17504/protocols.io.bfzwjp7e [Protocol]
Citation: SPARC Cat - Sham Control Chronic Cat 2 Day 30 v1. (2020).
<https://doi.org/10.17504/protocols.io.bfzwjp7e>

DOI: doi:10.17504/protocols.io.bfz3jp8n [Protocol]
Citation: SPARC Cat - Sham Control Chronic Implant Cat 4, Day 30 v1. (2020).
<https://doi.org/10.17504/protocols.io.bfz3jp8n>

In vitro imaging of mechanosensitive submucous neurons in the porcine colon

DOI: 10.26275/0khe-2os4 **Dataset ID:** 124 **Dataset Version:** 2

Citation: Mazzuoli-Weber, G., Elfers, K., & Filzmayer, A. K. (2021). *In vitro imaging of mechanosensitive submucous neurons in the porcine colon* (Version 2) [Dataset]. SPARC Portal. <https://doi.org/10.26275/0KHE-2OS4>

Dataset Citations

DOI: doi:10.17504/protocols.io.bpcamise [Protocol]

Citation: Mazzuoli-Weber, G., Elfers, K., & Katharina Filzmayer, A. (2020). Mechanosensitive enteric neurons: incidence and abundance in the porcine submucosal plexus with ultrafast neuroimaging and immunohistochemical techniques v1. <https://doi.org/10.17504/protocols.io.bpcamise>

DOI: doi:10.17504/protocols.io.btv3nn8n [Protocol]

Citation: Mechanosensitive enteric neurons: incidence and abundance in the porcine submucosal plexus with ultrafast neuroimaging and immunohistochemical techniques v1. (2021). <https://doi.org/10.17504/protocols.io.btv3nn8n>

DOI: doi:10.1038/s41598-020-70216-6 [Originating Publication]

Citation: Filzmayer, A. K., Elfers, K., Michel, K., Buhner, S., Zeller, F., Demir, I. E., Theisen, J., Schemann, M., & Mazzuoli-Weber, G. (2020). Compression and stretch sensitive submucosal neurons of the porcine and human colon. *Scientific Reports*, 10(1). <https://doi.org/10.1038/s41598-020-70216-6>

Phrenic nerve stimulation spinal intact rats

DOI: 10.26275/jkux-orfg **Dataset ID:** 151 **Dataset Version:** 1

Citation: Streeter, K., Sunshine, M., & Fuller, D. (2021). *Phrenic nerve stimulation spinal intact rats* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/JKUX-ORFG>

Dataset Citations

DOI: doi:10.17504/protocols.io.bgfzjtp6 [Protocol]

Citation: Streeter, K., sunshine, M., & Fuller, D. (2020). SPARC bilateral phrenic neurophysiology preparation with phrenic afferent stimulation - spinal intact study v1. <https://doi.org/10.17504/protocols.io.bgfzjtp6>

Sympathetic iBAT (interscapular brown adipose tissue) activation high fat (HF) low fat (LF) diet study

DOI: 10.26275/1h3s-thms **Dataset ID:** 152 **Dataset Version:** 1

Citation: Muenzberg, H., zhang, rui, Huesing, C., & Lee, N. (2021). *Sympathetic iBAT (interscapular brown adipose tissue) activation high fat (HF) low fat (LF) diet study* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/1H3S-THMS>

Dataset Citations

DOI: doi:10.17504/protocols.io.bh3tj8nn [Protocol]

Citation: Bilateral Adeno-associated virus (AAV) injection into interscapular brown adipose tissue v1. (2020). <https://doi.org/10.17504/protocols.io.bh3tj8nn>

Optogenetic iBAT (interscapular brown adipose tissue) stimulation in anesthetized mice

DOI: 10.26275/j4he-9spq **Dataset ID:** 153 **Dataset Version:** 1

Citation: Muenzberg, H., Huesing, C., Lee, N., & zhang, rui. (2021). *Optogenetic iBAT (interscapular brown adipose tissue) stimulation in anesthetized mice* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/J4HE-9SPQ>

Dataset Citations

DOI: doi:10.17504/protocols.io.bh3tj8nn [Protocol]
Citation: Bilateral Adeno-associated virus (AAV) injection into interscapular brown adipose tissue v1. (2020). <https://doi.org/10.17504/protocols.io.bh3tj8nn>

Antibodies tested in the colon – Mouse

DOI: 10.26275/i7dl-58h1 Dataset ID: 158 Dataset Version: 1

Citation: Wang, L., Yuan, P.-Q., Gould, T., & Tache, Y. (2021). *Antibodies tested in the colon – Mouse* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/i7DL-58H1>

Dataset Citations

DOI: doi:10.17504/protocols.io.bqavmse6 [Protocol]
Citation: Multicolor adeno-associate virus labeling and 3D digital tracing of enteric plexus in mouse proximal colon v1. (2020). <https://doi.org/10.17504/protocols.io.bqavmse6>

DOI: doi:10.1242/jcs.261950 [Citation]
Citation: Sorensen, L., Humenick, A., Poon, S. S. B., Han, M. N., Mahdavian, N. S., Rowe, M. C., Hamnett, R., Gómez-de-Mariscal, E., Neckel, P. H., Saito, A., Mutunduwe, K., Glennan, C., Haase, R., McQuade, R. M., Foong, J. P. P., Brookes, S. J. H., Kaltschmidt, J. A., Muñoz-Barrutia, A., King, S. K., & Rajasekhar, P. (2024). Gut Analysis Toolbox – automating quantitative analysis of enteric neurons. *Journal of Cell Science*, 137(20). <https://doi.org/10.1242/jcs.261950>

Sympathetic and parasympathetic effects on subcellular cAMP responses in isolated ventricular myocytes

DOI: 10.26275/ek1m-xqw1 Dataset ID: 159 Dataset Version: 1

Citation: Agarwal, S., & Harvey, R. (2021). *Sympathetic and parasympathetic effects on subcellular cAMP responses in isolated ventricular myocytes* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/EK1M-XQW1>

Dataset Citations

DOI: doi:10.17504/protocols.io.ba8hiht6 [Protocol]
Citation: Preparation of Adult Rat Ventricular Myocytes for FRET Imaging Experiments v1. (2020). <https://doi.org/10.17504/protocols.io.ba8hiht6>

DOI: doi:10.3389/fphar.2018.00332 [Originating Publication]
Citation: Agarwal, S. R., Gratwohl, J., Cozad, M., Yang, P.-C., Clancy, C. E., & Harvey, R. D. (2018). Compartmentalized cAMP Signaling Associated With Lipid Raft and Non-raft Membrane Domains in Adult Ventricular Myocytes. *Frontiers in Pharmacology*, 9. <https://doi.org/10.3389/fphar.2018.00332>

Single cell RNA sequencing (scRNAseq) analysis identifies the cell populations in the muscularis externa of the pig colon

DOI: 10.26275/lkvz-vrcy Dataset ID: 160 Dataset Version: 1

Citation: Li, T., Yuan, P.-Q., & Tache, Y. (2021). *Single cell RNA sequencing (scRNAseq) analysis identifies the cell populations in the muscularis externa of the pig colon* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/LKVZ-VRCY>

Dataset Citations

DOI: doi:10.17504/protocols.io.bgdmjs46 [Protocol]

Citation: Li, T., Yuan, P.-Q., & Tache, Y. (2020). A single cell RNA sequencing protocol for the pig colon v1. <https://doi.org/10.17504/protocols.io.bgdmjs46>

3D imaging of enteric neurons in a male mouse

DOI: 10.26275/wyn1-eww6 Dataset ID: 161 Dataset Version: 1

Citation: Kalinoski, A., & Howard, M. (2021). *3D imaging of enteric neurons in a male mouse* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/WYN1-EWW6>

Dataset Citations

DOI: doi:10.17504/protocols.io.wr6fd9e [Protocol]

Citation: Howard, M. (2019). Wholemount Immunolabeling for GUT Samples v1. <https://doi.org/10.17504/protocols.io.wr6fd9e>

Effects of subcutaneous nerve stimulation on nerve sprouting in ambulatory dogs

DOI: 10.26275/ngey-3iz7 Dataset ID: 162 Dataset Version: 1

Citation: Wan, J., Wong, J., & Chen, P.-S. (2021). *Effects of subcutaneous nerve stimulation on nerve sprouting in ambulatory dogs* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/NGEY-3IZ7>

Dataset Citations

DOI: doi:10.17504/protocols.io.bv94n98w [Protocol]

Citation: not provided, P.-Sheng. C., Kusayama, T., Wan, J., Yuan, Y., Liu, X., Li, X., Shen, C., C Fishbein, M., H Everett, T., & Peng-Sheng Chen, not provided. (2021). Trichrome Staining Protocol in studies of Effects of subcutaneous nerve stimulation on nerve sprouting in ambulatory dogs v1. <https://doi.org/10.17504/protocols.io.bv94n98w>

DOI: doi:10.17504/protocols.io.bv96n99e [Protocol]

Citation: Kusayama, T., Wan, J., Yuan, Y., Liu, X., Li, X., C Fishbein, M., H Everett, T., & not provided, P.-Sheng. C. (2021). Immunostaining of tissues from dogs with subcutaneous nerve stimulation v1. <https://doi.org/10.17504/protocols.io.bv96n99e>

DOI: doi:10.1016/j.hrthm.2019.02.027 [Originating Publication]

Citation: Wan, J., Chen, M., Yuan, Y., Wang, Z., Shen, C., Fishbein, M. C., Chen, Z., Wong, J., Grant, M. B., Everett, T. H., & Chen, P.-S. (2019). Antiarrhythmic and proarrhythmic effects of subcutaneous nerve stimulation in ambulatory dogs. *Heart Rhythm*, 16(8), 1251-1260. <https://doi.org/10.1016/j.hrthm.2019.02.027>

Sources of off-target effects for vagus nerve stimulation using the LivaNova clinical lead in swine

DOI: 10.26275/qcuk-a8ty Dataset ID: 163 Dataset Version: 1

Citation: Nicolai, E. N., Settell, M. L., Gosink, B., Grill, W. M., Pelot, N. A., Knudsen, B. E., McConico, A. L., Trevathan, J. K., Baumgart, I. W., Ross, E., Gustafson, K. J., Shoffstall, A. J., Williams, J. C., & Ludwig, K. A. (2021). *Sources of off-target effects for vagus nerve stimulation using the LivaNova clinical lead in swine* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/QCUK-A8TY>

Dataset Citations

DOI: doi:10.17504/protocols.io.bkeyktfw [Protocol]

Citation: Vagus Nerve Stimulation Evoked Electroneurography and Electromyography Recordings in Swine v1. (2020). <https://doi.org/10.17504/protocols.io.bkeyktfw>

DOI: doi:10.1088/1741-2552/ab9db8 [Originating Publication]

Citation: Nicolai, E. N., Settell, M. L., Knudsen, B. E., McConico, A. L., Gosink, B. A., Trevathan, J. K., Baumgart, I. W., Ross, E. K., Pelot, N. A., Grill, W. M., Gustafson, K. J., Shoffstall, A. J., Williams, J. C., & Ludwig, K. A. (2020). Sources of off-target effects of vagus nerve stimulation using the helical clinical lead in domestic pigs. *Journal of Neural Engineering*, 17(4), 046017. <https://doi.org/10.1088/1741-2552/ab9db8>

DOI: doi:10.1088/1741-2552/acda64 [Citation]

Citation: Musselman, E. D., Pelot, N. A., & Grill, W. M. (2023). Validated computational models predict vagus nerve stimulation thresholds in preclinical animals and humans. *Journal of Neural Engineering*, 20(3), 036032. <https://doi.org/10.1088/1741-2552/acda64>

DOI: doi:10.1101/2020.01.15.907246 [Citation]

Citation: Nicolai, E. N., Settell, M. L., Knudsen, B. E., McConico, A. L., Gosink, B. A., Trevathan, J. K., Baumgart, I. W., Ross, E. K., Pelot, N. A., Grill, W. M., Gustafson, K. J., Shoffstall, A. J., Williams, J. C., & Ludwig, K. A. (2020). Sources of Off-Target Effects of Vagus Nerve Stimulation Using the Helical Clinical Lead in Domestic Pigs. <https://doi.org/10.1101/2020.01.15.907246>

Functional mapping with lumbosacral epidural stimulation for restoration of bladder function after spinal cord injury in rats (T13)

DOI: 10.26275/er7m-gir3 Dataset ID: 164 Dataset Version: 1

Citation: Hubscher, C., Harkema, S., El-Baz, A., Mohamed, A., Wagers, S., Ugiliweneza, B., Herrity, A., Johnson, K., Armstrong, J., Fell, J., Chen, Y.-P., Zdunowski, S., Gallahar, A., Hargitt, J., Dougherty, S., Wade, S., Wyles, E., Hoey, R., Medina Aguiñaga, D., ... Ichiyama, R. (2021). *Functional mapping with lumbosacral epidural stimulation for restoration of bladder function after spinal cord injury in rats (T13)* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/ER7M-GIR3>

Dataset Citations

DOI: doi:10.17504/protocols.io.w6hfhb6 [Protocol]

Citation: Hubscher, C., & Hoey, R. (2019). Epidural stimulation mapping protocol v1. <https://doi.org/10.17504/protocols.io.w6hfhb6>

DOI: doi:10.1038/s41598-021-81822-3 [Originating Publication]

Citation: Hoey, R. F., Medina-Aguíñaga, D., Khalifa, F., Ugiliweneza, B., Zdunowski, S., Fell, J., Naglah, A., El-Baz, A. S., Herrity, A. N., Harkema, S. J., & Hubscher, C. H. (2021). Bladder and bowel responses to lumbosacral epidural stimulation in uninjured and transected anesthetized rats. *Scientific Reports*, 11(1). <https://doi.org/10.1038/s41598-021-81822-3>

Quantified morphology of the human vagus nerve with anti-claudin-1

DOI: 10.26275/ofja-ghoz Dataset ID: 65 Dataset Version: 7

Citation: Pelot, N. A., Ezzell, J. A., Goldhagen, G. B., Cariello, J. E., Clissold, K. A., & Grill, W. M. (2021). *Quantified morphology of the human vagus nerve with anti-claudin-1* (Version 7) [Data set]. SPARC Portal. <https://doi.org/10.26275/OFJA-GHOZ>

Dataset Citations

DOI: doi:10.17504/protocols.io.bh4dj8s6 [Protocol]
Citation: SPARC_Duke_PelotGrill_OT2-OD025340_HumanVagusNerve_Claudin1IHC_Morphology v4. (2020).
<https://doi.org/10.17504/protocols.io.bh4dj8s6>

DOI: doi:10.12688/f1000research.73492.1 [Citation]
Citation: Quey, R., Schiefer, M. A., Kiran, A., & Patel, B. (2021). KnowMore: an automated knowledge discovery tool for the FAIR SPARC datasets. F1000Research, 10, 1132.
<https://doi.org/10.12688/f1000research.73492.1>

DOI: doi:10.1088/1741-2552/acda64 [Citation]
Citation: Musselman, E. D., Pelot, N. A., & Grill, W. M. (2023). Validated computational models predict vagus nerve stimulation thresholds in preclinical animals and humans. Journal of Neural Engineering, 20(3), 036032. <https://doi.org/10.1088/1741-2552/acda64>

DOI: doi:10.1038/s41467-024-51709-8 [Citation]
Citation: Hussain, M. A., Grill, W. M., & Pelot, N. A. (2024). Highly efficient modeling and optimization of neural fiber responses to electrical stimulation. Nature Communications, 15(1).
<https://doi.org/10.1038/s41467-024-51709-8>

DOI: doi:10.1101/2021.08.08.455581 [Citation]
Citation: Quey, R., Schiefer, M. A., Kiran, A., & Patel, B. (2021). KnowMore: an automated knowledge discovery tool for the FAIR SPARC datasets.
<https://doi.org/10.1101/2021.08.08.455581>

DOI: doi:10.3389/fnins.2020.601479 [Originating Publication]
Citation: Pelot, N. A., Goldhagen, G. B., Cariello, J. E., Musselman, E. D., Clissold, K. A., Ezzell, J. A., & Grill, W. M. (2020). Quantified Morphology of the Cervical and Subdiaphragmatic Vagus Nerves of Human, Pig, and Rat. Frontiers in Neuroscience, 14.
<https://doi.org/10.3389/fnins.2020.601479>

DOI: doi:10.1101/2021.08.08.455581v1 [Citation]
Citation: CITATION[10.1101/2021.08.08.455581v1]

Endorgan-specific Pseudorabies (PRV) infection in mouse kidney and liver

DOI: 10.26275/pvib-4jat **Dataset ID:** 165 **Dataset Version:** 1

Citation: Huesing, C., Muenzberg, H., Derbenev, A., Zsombok, A., Burk, D., & Torres, H. (2021). *Endorgan-specific Pseudorabies (PRV) infection in mouse kidney and liver* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/PVIB-4JAT>

Dataset Citations

DOI: doi:10.17504/protocols.io.bujanuiie [Protocol]
Citation: Peripheral PRV injection - Kidney & Liver Protocol v1. (2021).
<https://doi.org/10.17504/protocols.io.bujanuiie>

DOI: doi:10.1152/ajpregu.00079.2021 [Originating Publication]
Citation: Torres, H., Huesing, C., Burk, D. H., Molinas, A. J. R., Neuhauser, W. L., Berthoud, H.-R., Muenzberg, H., Derbenev, A. V., & Zsombok, A. (2021). Sympathetic innervation of the mouse kidney and liver arising from prevertebral ganglia. American Journal of Physiology-Regulatory, Integrative and Comparative Physiology, 321(3), R328âR337.
<https://doi.org/10.1152/ajpregu.00079.2021>

Mapping of intrinsic cardiac nervous system (ICN) neurons in a 3D reconstructed rat heart

DOI: 10.26275/pb3l-251h **Dataset ID:** 37 **Dataset Version:** 3

Citation: Leung, C., Chen, J., Moss, A., Heal, M., Huffman, T., Farahani, N., Eisenman, L., Cheng, Z., Tappan, S., Vadigepalli, R., & Schwaber, J. (2021). *Mapping of intrinsic cardiac nervous system (ICN) neurons in a 3D reconstructed rat heart* (Version 3) [Data set]. SPARC Portal. <https://doi.org/10.26275/PB3L-251H>

Dataset Citations

DOI: doi:10.17504/protocols.io.bdz5i786 [Protocol]

Citation: Leung, C., Heal, M., Robbins, S., Moss, A., Monteith, C., & Tappan, S. (2020). Single-Cell ICN Neuron Mapping and 3D Heart Reconstruction with Tissue Mapper v1. <https://doi.org/10.17504/protocols.io.bdz5i786>

DOI: doi:10.1016/j.isci.2020.101140 [Originating Publication]

Citation: Achanta, S., Gorky, J., Leung, C., Moss, A., Robbins, S., Eisenman, L., Chen, J., Tappan, S., Heal, M., Farahani, N., Huffman, T., England, S., Cheng, Z. (Jack), Vadigepalli, R., & Schwaber, J. S. (2020). A Comprehensive Integrated Anatomical and Molecular Atlas of Rat Intrinsic Cardiac Nervous System. *IScience*, 23(6), 101140. <https://doi.org/10.1016/j.isci.2020.101140>

DOI: doi:10.1016/j.isci.2021.102795 [Citation]

Citation: Leung, C., Robbins, S., Moss, A., Heal, M., Osanlouy, M., Christie, R., Farahani, N., Monteith, C., Chen, J., Hunter, P., Tappan, S., Vadigepalli, R., Cheng, Z. (Jack), & Schwaber, J. S. (2021). 3D single cell scale anatomical map of sex-dependent variability of the rat intrinsic cardiac nervous system. *IScience*, 24(7), 102795. <https://doi.org/10.1016/j.isci.2021.102795>

Monosynaptic circuit mapping of iBAT (interscapular brown adipose tissues) in mice

DOI: 10.26275/do5j-enxl **Dataset ID:** 168 **Dataset Version:** 1

Citation: Huesing, C., zhang, rui, & Muenzberg, H. (2021). *Monosynaptic circuit mapping of iBAT (interscapular brown adipose tissues) in mice* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/DO5J-ENXL>

Dataset Citations

DOI: doi:10.17504/protocols.io.wzuff6w [Protocol]

Citation: Huesing, C., Muenzberg, H., Burk, D., & Torres, H. (2019). iDISCO protocol for whole-mount immunostaining and volume imaging v1. <https://doi.org/10.17504/protocols.io.wzuff6w>

DOI: doi:10.17504/protocols.io.wz3ff8n [Protocol]

Citation: Huesing, C., Torres, H., Burk, D., & Muenzberg, H. (2019). Light sheet microscopy v1. <https://doi.org/10.17504/protocols.io.wz3ff8n>

DOI: doi:10.17504/protocols.io.baamiac6 [Protocol]

Citation: Pseudorabies virus (PRV) injection into inguinal white adipose tissue v1. (2019). <https://doi.org/10.17504/protocols.io.baamiac6>

Effects of nodose ganglion blockade on gastric motility during cervical vagus nerve stimulation measured with magnetic resonance imaging in rats

DOI: 10.26275/t8he-z5uu **Dataset ID:** 169 **Dataset Version:** 1

Citation: Lu, K.-H., Powley, T. L., Liu, Z., Jaffey, D., & Rajwa, B. (2021). *Effects of nodose ganglion blockade on gastric motility during cervical vagus nerve stimulation measured with magnetic resonance imaging in rats* (Version 1) [Data

set]. SPARC Portal. <https://doi.org/10.26275/T8HE-Z5UU>

Dataset Citations

DOI: [doi:10.17504/protocols.io.bawfifbn](https://doi.org/10.17504/protocols.io.bawfifbn) [Protocol]
Citation: Effects of Vagus Nerve Stimulation/Gastric Electrical Stimulation on Gastric Emptying and Motility Assessed with Magnetic Resonance Imaging v1. (2019).
<https://doi.org/10.17504/protocols.io.bawfifbn>

iWAT (inguinal white adipose tissue) sympathetic innervation circuit pseudorabies viral tracing in reporter mice

DOI: 10.26275/mhq6-csy1 **Dataset ID:** 175 **Dataset Version:** 1

Citation: Muenzberg, H., Berthoud, H.-R., Burk, D., Morrison, C. D., Yu, S., Qualls-Creekmore, E., François, M., Zhang, R., Huesing, C., Lee, N., Torres, H., & Saurage, C. (2021). *iWAT (inguinal white adipose tissue) sympathetic innervation circuit pseudorabies viral tracing in reporter mice* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/MHQ6-CSY1>

Dataset Citations

DOI: [doi:10.17504/protocols.io.wzuff6w](https://doi.org/10.17504/protocols.io.wzuff6w) [Protocol]
Citation: Huesing, C., Muenzberg, H., Burk, D., & Torres, H. (2019). iDISCO protocol for whole-mount immunostaining and volume imaging v1. <https://doi.org/10.17504/protocols.io.wzuff6w>

DOI: [doi:10.17504/protocols.io.wz3ff8n](https://doi.org/10.17504/protocols.io.wz3ff8n) [Protocol]
Citation: Huesing, C., Torres, H., Burk, D., & Muenzberg, H. (2019). Light sheet microscopy v1. <https://doi.org/10.17504/protocols.io.wz3ff8n>

DOI: [doi:10.17504/protocols.io.baamiac6](https://doi.org/10.17504/protocols.io.baamiac6) [Protocol]
Citation: Pseudorabies virus (PRV) injection into inguinal white adipose tissue v1. (2019). <https://doi.org/10.17504/protocols.io.baamiac6>

DOI: [doi:10.1002/cne.25031](https://doi.org/10.1002/cne.25031) [Originating Publication]
Citation: Huesing, C., Qualls-Creekmore, E., Lee, N., François, M., Torres, H., Zhang, R., Burk, D. H., Yu, S., Morrison, C. D., Berthoud, H., Neuhuber, W., & Münzberg, H. (2020). Sympathetic innervation of inguinal white adipose tissue in the mouse. *Journal of Comparative Neurology*, 529(7), 1465–1485. Portico. <https://doi.org/10.1002/cne.25031>

Intraneural recordings in rat vagus nerves using carbon fiber microelectrode arrays

DOI: 10.26275/j5wc-rwcr **Dataset ID:** 177 **Dataset Version:** 1

Citation: Jiman, A., Ratze, D., Welle, E., Patel, P., Bottorff, E., Richie, J., Seymour, J., Chestek, C., & Bruns, T. (2021). *Intraneural recordings in rat vagus nerves using carbon fiber microelectrode arrays* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/J5WC-RWCR>

Dataset Citations

DOI: doi:10.17504/protocols.io.bet2jeqe [Protocol]
Citation: Intraneural Recordings in Rat Vagus Nerves Using Carbon Fiber Microelectrode Arrays v1. (2020). <https://doi.org/10.17504/protocols.io.bet2jeqe>

DOI: doi:10.1038/s41598-020-72512-7 [Citation]
Citation: Jiman, A. A., Ratze, D. C., Welle, E. J., Patel, P. R., Richie, J. M., Bottorff, E. C., Seymour, J. P., Chestek, C. A., & Bruns, T. M. (2020). Multi-channel intraneural vagus nerve recordings with a novel high-density carbon fiber microelectrode array. *Scientific Reports*, 10(1). <https://doi.org/10.1038/s41598-020-72512-7>

3D imaging of enteric neurons in mouse

DOI: 10.26275/9ffg-482d **Dataset ID:** 178 **Dataset Version:** 1

Citation: Howard, M. (2021). *3D imaging of enteric neurons in mouse* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/9FFG-482D>

Dataset Citations

DOI: doi:10.17504/protocols.io.bwuapese [Protocol]
Citation: Wholemount immunolabeling of mouse gut tissue v1. (2021). <https://doi.org/10.17504/protocols.io.bwuapese>

DOI: doi:10.1242/jcs.261950 [Citation]
Citation: Sorensen, L., Humenick, A., Poon, S. S. B., Han, M. N., Mahdavian, N. S., Rowe, M. C., Hamnett, R., GÃmez-de-Mariscal, E., Neckel, P. H., Saito, A., Mutunduwe, K., Glennan, C., Haase, R., McQuade, R. M., Foong, J. P. P., Brookes, S. J. H., Kaltschmidt, J. A., MuÃoz-Barrutia, A., King, S. K., & Rajasekhar, P. (2024). Gut Analysis Toolbox â automating quantitative analysis of enteric neurons. *Journal of Cell Science*, 137(20). <https://doi.org/10.1242/jcs.261950>

DOI: doi:10.1016/j.jcmgh.2021.08.016 [Originating Publication]
Citation: Nestor-Kalinoski, A., Smith-Edwards, K. M., Meerschaert, K., Margiotta, J. F., Rajwa, B., Davis, B. M., & Howard, M. J. (2022). Unique Neural Circuit Connectivity of Mouse Proximal, Middle, and Distal Colon Defines Regional Colonic Motor Patterns. *Cellular and Molecular Gastroenterology and Hepatology*, 13(1), 309-337.e3. <https://doi.org/10.1016/j.jcmgh.2021.08.016>

Spatially tracked single-cell transcriptomics map of neuronal networks in the intrinsic cardiac nervous system

DOI: 10.26275/hrww-enzr **Dataset ID:** 115 **Dataset Version:** 2

Citation: Vadigepalli, R., Schwaber, J., Robbins, S., Kuttippurathu, L., Achanta, S., Moss, A., & Heal, M. (2021). *Spatially tracked single-cell transcriptomics map of neuronal networks in the intrinsic cardiac nervous system* (Version 2) [Data set]. SPARC Portal. <https://doi.org/10.26275/HRWW-ENZR>

Dataset Citations

DOI: doi:10.21203/rs.3.pex-928/v1 [Citation]

Citation: Robbins, S., Vadigepalli, R., & Schwaber, J. (2021). Cryosectioning, block face imaging and Nissl staining fluorescently labeled pig heart. <https://doi.org/10.21203/rs.3.pex-928/v1>

DOI: doi:10.21203/rs.3.pex-927/v1 [Citation]

Citation: Robbins, S., Achanta, S., & Vadigepalli, R. (2021). Laser Capture Microdissection (LCM) and 3D Sample Tracking Protocol. <https://doi.org/10.21203/rs.3.pex-927/v1>

DOI: doi:10.21203/rs.3.pex-962/v1 [Citation]

Citation: Kuttippurathu, L., Moss, A., & Vadigepalli, R. (2021). Single Cell scale RNA-seq Analysis Protocol to analyze Smart-3SEQ data from RAGP neurons of pig heart. <https://doi.org/10.21203/rs.3.pex-962/v1>

DOI: doi:10.21203/rs.3.pex-919/v1 [Citation]

Citation: Achanta, S., & Vadigepalli, R. (2021). Single cell high-throughput qRT-PCR protocol. <https://doi.org/10.21203/rs.3.pex-919/v1>

DOI: doi:10.21203/rs.3.pex-922/v1 [Citation]

Citation: Robbins, S., Vadigepalli, R., & Schwaber, J. (2021). Single-Cell Mapping and 3D Tissue Reconstruction using Cryosection-derived Images and Tissue Mapper software. <https://doi.org/10.21203/rs.3.pex-922/v1>

DOI: doi:10.1016/j.isci.2021.102713 [Citation]

Citation: Moss, A., Robbins, S., Achanta, S., Kuttippurathu, L., Turick, S., Nieves, S., Hanna, P., Smith, E. H., Hoover, D. B., Chen, J., Cheng, Z. (Jack), Ardell, J. L., Shivkumar, K., Schwaber, J. S., & Vadigepalli, R. (2021). A single cell transcriptomics map of paracrine networks in the intrinsic cardiac nervous system. *IScience*, 24(7), 102713. <https://doi.org/10.1016/j.isci.2021.102713>

Spatially tracked single-neuron transcriptomics of a female porcine right atrial ganglionic plexus (RAGP)

DOI: 10.26275/slsc-eahw **Dataset ID:** 117 **Dataset Version:** 2

Citation: Moss, A., Robbins, S., Achanta, S., Schwaber, J., & Vadigepalli, R. (2021). *Spatially tracked single-neuron transcriptomics of a female porcine right atrial ganglionic plexus (RAGP)* (Version 2) [Data set]. SPARC Portal. <https://doi.org/10.26275/SLSC-EAHW>

Dataset Citations

DOI: doi:10.21203/rs.3.pex-922/v1 [Citation]

Citation: Robbins, S., Vadigepalli, R., & Schwaber, J. (2021). Single-Cell Mapping and 3D Tissue Reconstruction using Cryosection-derived Images and Tissue Mapper software. <https://doi.org/10.21203/rs.3.pex-922/v1>

DOI: doi:10.1016/j.isci.2021.102713 [Citation]

Citation: Moss, A., Robbins, S., Achanta, S., Kuttippurathu, L., Turick, S., Nieves, S., Hanna, P., Smith, E. H., Hoover, D. B., Chen, J., Cheng, Z. (Jack), Ardell, J. L., Shivkumar, K., Schwaber, J. S., & Vadigepalli, R. (2021). A single cell transcriptomics map of paracrine networks in the intrinsic cardiac nervous system. *IScience*, 24(7), 102713. <https://doi.org/10.1016/j.isci.2021.102713>

Spatially tracked single-neuron transcriptomics of a male porcine right atrial ganglionic plexus (RAGP)

DOI: 10.26275/c14g-2czn **Dataset ID:** 118 **Dataset Version:** 2

Citation: Moss, A., Robbins, S., Achanta, S., Schwaber, J., & Vadigepalli, R.

(2021). *Spatially tracked single-neuron transcriptomics of a male porcine right atrial ganglionic plexus (RAGP)* (Version 2) [Data set]. SPARC Portal.
<https://doi.org/10.26275/C14G-2CZN>

Dataset Citations

DOI: doi:10.21203/rs.3.pex-922/v1 [Citation]
Citation: Robbins, S., Vadigepalli, R., & Schwaber, J. (2021). Single-Cell Mapping and 3D Tissue Reconstruction using Cryosection-derived Images and Tissue Mapper software.
<https://doi.org/10.21203/rs.3.pex-922/v1>

DOI: doi:10.1016/j.isci.2021.102713 [Citation]
Citation: Moss, A., Robbins, S., Achanta, S., Kuttippurathu, L., Turick, S., Nieves, S., Hanna, P., Smith, E. H., Hoover, D. B., Chen, J., Cheng, Z. (Jack), Ardell, J. L., Shivkumar, K., Schwaber, J. S., & Vadigepalli, R. (2021). A single cell transcriptomics map of paracrine networks in the intrinsic cardiac nervous system. *IScience*, 24(7), 102713.
<https://doi.org/10.1016/j.isci.2021.102713>

Effects of subcutaneous nerve stimulation with blindly inserted electrodes on ventricular rate control in a canine model of persistent atrial fibrillation

DOI: 10.26275/fsfw-dmfd **Dataset ID:** 181 **Dataset Version:** 1

Citation: Kusayama, T., Yuan, Y., Wan, J., Xiao, L., Li, X., Shen, C., Fishbein, M., Everett, T., & Chen, P.-S. (2021). *Effects of subcutaneous nerve stimulation with blindly inserted electrodes on ventricular rate control in a canine model of persistent atrial fibrillation* (Version 1) [Data set]. SPARC Portal.
<https://doi.org/10.26275/FSFW-DMFD>

Dataset Citations

DOI: doi:10.17504/protocols.io.bz5wp87e [Protocol]
Citation: Subcutaneous nerve stimulation in canine model of persistent atrial fibrillation v1. (2021). <https://doi.org/10.17504/protocols.io.bz5wp87e>

DOI: doi:10.1016/j.hrthm.2020.09.009 [Originating Publication]
Citation: Kusayama, T., Wan, J., Yuan, Y., Liu, X., Li, X., Shen, C., Fishbein, M. C., Everett, T. H., & Chen, P.-S. (2021). Effects of subcutaneous nerve stimulation with blindly inserted electrodes on ventricular rate control in a canine model of persistent atrial fibrillation. *Heart Rhythm*, 18(2), 261â270. <https://doi.org/10.1016/j.hrthm.2020.09.009>

Acute effects of efferent and afferent vagus nerve stimulation (VNS) on neural activity accessed with functional Magnetic Resonance Imaging (fMRI) in rats (Part 2)

DOI: 10.26275/eqqv-ozxc **Dataset ID:** 183 **Dataset Version:** 1

Citation: Cao, J., Powley, T. L., Liu, Z., Jaffey, D., & Rajwa, B. (2021). *Acute effects of efferent and afferent vagus nerve stimulation (VNS) on neural activity accessed with functional Magnetic Resonance Imaging (fMRI) in rats (Part 2)* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/EOQV-OZXC>

Dataset Citations

DOI: doi:10.17504/protocols.io.bciwiufe [Protocol]
Citation: Effects of Vagus Nerve Stimulation/Gastric Electrical Stimulation on Brain Neural Activity Assessed with Magnetic Resonance Imaging and electrophysiology v1. (2020).
<https://doi.org/10.17504/protocols.io.bciwiufe>

Acute effects of gastric electrical stimulation (GES) settings on neural activity accessed with functional magnetic resonance imaging (fMRI) in rats

DOI: 10.26275/ypwk-0xbo **Dataset ID:** 185 **Dataset Version:** 1

Citation: Cao, J., Powley, T. L., Liu, Z., Jaffey, D., & Rajwa, B. (2021). *Acute effects of gastric electrical stimulation (GES) settings on neural activity accessed with functional magnetic resonance imaging (fMRI) in rats* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/YPWK-0XBO>

Dataset Citations

DOI: doi:10.17504/protocols.io.bciwiufe [Protocol]
Citation: Effects of Vagus Nerve Stimulation/Gastric Electrical Stimulation on Brain Neural Activity Assessed with Magnetic Resonance Imaging and electrophysiology v1. (2020).
<https://doi.org/10.17504/protocols.io.bciwiufe>

Simulations of pelvic and vagus neural interface anatomy-dependent stimulus and recording properties

DOI: 10.26275/z61u-2tcs **Dataset ID:** 188 **Dataset Version:** 1

Citation: Eiber, C. D., Payne, S., Osborne, P., Keast, J. R., & Fallon, J. (2021). *Simulations of pelvic and vagus neural interface anatomy-dependent stimulus and recording properties* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/Z61U-2TCS>

Dataset Citations

DOI: doi:10.1088/1741-2552/ac36e2 [Originating Publication]
Citation: Eiber, C. D., Payne, S. C., Biscola, N. P., Havton, L. A., Keast, J. R., Osborne, P. B., & Fallon, J. B. (2021). Computational modelling of nerve stimulation and recording with peripheral visceral neural interfaces. *Journal of Neural Engineering*, 18(6), 066020.
<https://doi.org/10.1088/1741-2552/ac36e2>

Identification of lung innervating sensory neurons and their target specificity in mouse (1)

DOI: 10.26275/e6vk-2lky **Dataset ID:** 189 **Dataset Version:** 1

Citation: Barr, J., Verheyden, J., & Sun, X. (2021). *Identification of lung innervating sensory neurons and their target specificity in mouse (1)* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/E6VK-2LKY>

Dataset Citations

DOI: doi:10.17504/protocols.io.b2gvqbw6 [Protocol]
Citation: Protocol for CUBIC Clearing and Whole Mount Imaging of Mouse Lung Lobes v1.
(2021). <https://doi.org/10.17504/protocols.io.b2gvqbw6>

DOI: doi:10.1152/ajplung.00376.2021 [Originating Publication]
Citation: Su, Y., Barr, J., Jaquish, A., Xu, J., Verheyden, J. M., & Sun, X. (2022). Identification of lung innervating sensory neurons and their target specificity. *American Journal of Physiology-Lung Cellular and Molecular Physiology*, 322(1), L50âL63.
<https://doi.org/10.1152/ajplung.00376.2021>

Safety testing of the Fecobionics device

DOI: 10.26275/ts6z-z80x **Dataset ID:** 205 **Dataset Version:** 1

Citation: Wang, Y., Patel, B., Kassab, G., & Gregersen, H. (2021). *Safety testing of the Fecobionics device* (Version 1) [Data set]. SPARC Portal.
<https://doi.org/10.26275/TS6Z-Z80X>

Dataset Citations

DOI: doi:10.17504/protocols.io.9nih5ce [Protocol]
Citation: Safety Study of Wireless Fecobionics Device v1. (2019).
<https://doi.org/10.17504/protocols.io.9nih5ce>

Recording of electrically evoked neural activity and bladder pressure responses in awake rats chronically implanted with a pelvic nerve array

DOI: 10.26275/kkmb-vun5 **Dataset ID:** 206 **Dataset Version:** 1

Citation: Payne, S., Eiber, C. D., Wiedmann, N., Wong, A. W., Senn, P., Osborne, P., Keast, J. R., & Fallon, J. (2021). *Recording of electrically evoked neural activity and bladder pressure responses in awake rats chronically implanted with a pelvic nerve array* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/KKMB-VUN5>

Dataset Citations

DOI: doi:10.17504/protocols.io.bgrmjv46 [Protocol]
Citation: B Fallon, J., Payne, S., B Osborne, P., & R Keast, J. (2020). Pelvic nerve implantation, testing and processing in awake rats v1. <https://doi.org/10.17504/protocols.io.bgrmjv46>

DOI: doi:10.3389/fnins.2020.619275 [Originating Publication]
Citation: Payne, S. C., Wiedmann, N. M., Eiber, C. D., Wong, A. W., Senn, P., Osborne, P. B., Keast, J. R., & Fallon, J. B. (2020). Recording of Electrically Evoked Neural Activity and Bladder Pressure Responses in Awake Rats Chronically Implanted With a Pelvic Nerve Array. *Frontiers in Neuroscience*, 14. <https://doi.org/10.3389/fnins.2020.619275>

Identification of peripheral neural circuits that regulate heart rate using optogenetic and viral vector strategies part (2)

DOI: 10.26275/s2vo-pje2 **Dataset ID:** 204 **Dataset Version:** 1

Citation: Rajendran, P., Challis, R., Fowlkes, C., Hanna, P., Tompkins, J. D., Hiyari, S., Muenzberg, H., Ardell, J., Salama, G., Gradinaru, V., & Shivkumar, K. (2021). *Identification of peripheral neural circuits that regulate heart rate using optogenetic and viral vector strategies part (2)* (Version 1) [Data set]. SPARC Portal.
<https://doi.org/10.26275/S2VO-PJE2>

Dataset Citations

DOI: doi:10.17504/protocols.io.x3sfqne [Protocol]
Citation: Rajendran, P. (2019). iDISCO clearing of mouse heart v1.
<https://doi.org/10.17504/protocols.io.x3sfqne>

DOI: doi:10.1038/s41467-019-09770-1 [Originating Publication]
Citation: Rajendran, P. S., Challis, R. C., Fowlkes, C. C., Hanna, P., Tompkins, J. D., Jordan, M. C., Hiyari, S., Gabris-Weber, B. A., Greenbaum, A., Chan, K. Y., Deverman, B. E., MÄnzberg, H., Ardell, J. L., Salama, G., Gradinaru, V., & Shivkumar, K. (2019). Identification of peripheral neural circuits that regulate heart rate using optogenetic and viral vector strategies. *Nature Communications*, 10(1). <https://doi.org/10.1038/s41467-019-09770-1>

ViNERS (Visceral Nerve Ensemble Recording & Stimulation) peripheral neural interface modeling environment

DOI: 10.26275/chfk-eugm **Dataset ID: 207 Dataset Version: 1**

Citation: Eiber, C. D., Fallon, J., Osborne, P., & Keast, J. R. (2021). *ViNERS (Visceral Nerve Ensemble Recording & Stimulation) peripheral neural interface modeling environment* (Version 1) [Data set]. SPARC Portal.
<https://doi.org/10.26275/CHFK-EUGM>

Dataset Citations

DOI: doi:10.1109/EMBC44109.2020.9175921 [Originating Publication]
Citation: Eiber, C. D., Keast, J. R., & Osborne, P. B. (2020). Simulating bidirectional peripheral neural interfaces in EIDORS. 2020 42nd Annual International Conference of the IEEE Engineering in Medicine & Biology Society (EMBC), 2934-2937.
<https://doi.org/10.1109/embc44109.2020.9175921>

DOI: doi:10.1088/1741-2552/ac36e2 [Citation]
Citation: Eiber, C. D., Payne, S. C., Biscola, N. P., Havton, L. A., Keast, J. R., Osborne, P. B., & Fallon, J. B. (2021). Computational modelling of nerve stimulation and recording with peripheral visceral neural interfaces. *Journal of Neural Engineering*, 18(6), 066020.
<https://doi.org/10.1088/1741-2552/ac36e2>

Quantitative analysis of enteric neurons containing choline acetyltransferase and nitric oxide synthase immunoreactivities in the submucosal and myenteric plexuses of the porcine colon

DOI: 10.26275/g3xc-oztw **Dataset ID: 209 Dataset Version: 1**

Citation: Cabanillas, L., Mulugeta, M., Mazzoni, M., Larauche, M., Sternini, C., Caremoli, F., de los Santos, J., Clavenzani, P., & De Giorgio, R. (2022). *Quantitative analysis of enteric neurons containing choline acetyltransferase and nitric oxide synthase immunoreactivities in the submucosal and myenteric plexuses of the porcine colon* (Version 1) [Data set]. SPARC Portal.
<https://doi.org/10.26275/G3XC-OZTW>

Dataset Citations

DOI: doi:10.17504/protocols.io.bfqmjmu6 [Protocol]

Citation: Quantitative analysis of enteric neurons containing choline acetyltransferase and nitric oxide synthase immunoreactivities in the submucosal and myenteric plexuses of the porcine colon v1. (2020). <https://doi.org/10.17504/protocols.io.bfqmjmu6>

DOI: doi:10.1007/s00441-020-03286-7 [Originating Publication]

Citation: Mazzoni, M., Caremoli, F., Cabanillas, L., de los Santos, J., Million, M., Larauche, M., Clavenzani, P., De Giorgio, R., & Sternini, C. (2020). Quantitative analysis of enteric neurons containing choline acetyltransferase and nitric oxide synthase immunoreactivities in the submucosal and myenteric plexuses of the porcine colon. *Cell and Tissue Research*, 383(2), 645â654. <https://doi.org/10.1007/s00441-020-03286-7>

Acute effects of gastric electrical stimulation settings on gastric motility assessed with magnetic resonance imaging in rats

DOI: 10.26275/tbuz-s6gu Dataset ID: 210 Dataset Version: 1

Citation: Lu, K.-H., Rajwa, B., Jaffey, D., Powley, T. L., & Liu, Z. (2021). *Acute effects of gastric electrical stimulation settings on gastric motility assessed with magnetic resonance imaging in rats* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/TBUZ-S6GU>

Dataset Citations

DOI: doi:10.17504/protocols.io.bawfifbn [Protocol]

Citation: Effects of Vagus Nerve Stimulation/Gastric Electrical Stimulation on Gastric Emptying and Motility Assessed with Magnetic Resonance Imaging v1. (2019). <https://doi.org/10.17504/protocols.io.bawfifbn>

Acute effects of efferent and afferent vagus nerve stimulation (VNS) on neural activity accessed with functional Magnetic Resonance Imaging (fMRI) in rats

DOI: 10.26275/9uqz-zwnh Dataset ID: 180 Dataset Version: 2

Citation: Cao, J., Jaffey, D., Rajwa, B., Powley, T. L., & Liu, Z. (2022). *Acute effects of efferent and afferent vagus nerve stimulation (VNS) on neural activity accessed with functional Magnetic Resonance Imaging (fMRI) in rats* (Version 2) [Data set]. SPARC Portal. <https://doi.org/10.26275/9UQZ-ZWNH>

Dataset Citations

DOI: doi:10.17504/protocols.io.bciwiufe [Protocol]

Citation: Effects of Vagus Nerve Stimulation/Gastric Electrical Stimulation on Brain Neural Activity Assessed with Magnetic Resonance Imaging and electrophysiology v1. (2020). <https://doi.org/10.17504/protocols.io.bciwiufe>

Acute effects of vagus nerve stimulation (VNS) settings on neural activity in the nucleus of solitary tract (NTS) in rats

DOI: 10.26275/ih2m-pphy Dataset ID: 211 Dataset Version: 1

Citation: Cao, J., Jaffey, D., Rajwa, B., Powley, T. L., & Liu, Z. (2021). *Acute effects of vagus nerve stimulation (VNS) settings on neural activity in the nucleus of solitary tract (NTS) in rats* (Version 1) [Data set]. SPARC Portal.

<https://doi.org/10.26275/IH2M-PPHY>

Dataset Citations

DOI: doi:10.17504/protocols.io.bciwiufe [Protocol]

Citation: Effects of Vagus Nerve Stimulation/Gastric Electrical Stimulation on Brain Neural Activity Assessed with Magnetic Resonance Imaging and electrophysiology v1. (2020). <https://doi.org/10.17504/protocols.io.bciwiufe>

Sympathetic nerve stimulation of mouse and rabbit hearts

DOI: 10.26275/lok5-wje6 Dataset ID: 212 Dataset Version: 1

Citation: Ripplinger, C., Grandi, E., Wang, L., & Morotti, S. (2022). *Sympathetic nerve stimulation of mouse and rabbit hearts* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/LOK5-WJE6>

Dataset Citations

DOI: doi:10.1113/JP278016 [Originating Publication]

Citation: Wang, L., Morotti, S., Tapa, S., Francis Stuart, S. D., Jiang, Y., Wang, Z., Myles, R. C., Brack, K. E., Ng, G. A., Bers, D. M., Grandi, E., & Ripplinger, C. M. (2019). Different paths, same destination: divergent action potential responses produce conserved cardiac fight-or-flight response in mouse and rabbit hearts. *The Journal of Physiology*, 597(15), 3867-3883. Portico. <https://doi.org/10.1113/jp278016>

Characterization of adeno associated virus serotypes 4 weeks after pancreas injection in mice

DOI: 10.26275/wlhm-c7ba Dataset ID: 215 Dataset Version: 1

Citation: Li, R., Jimenez-Gonzalez, M., & Stanley, S. (2022). *Characterization of adeno associated virus serotypes 4 weeks after pancreas injection in mice* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/WLHM-C7BA>

Dataset Citations

DOI: doi:10.17504/protocols.io.14egnx47pl5d/v1 [Protocol]

Citation: Jimenez Gonzalez, M. (2019). Intrapancreatic injection surgery v1. <https://doi.org/10.17504/protocols.io.14egnx47pl5d/v1>

Functional mapping with lumbosacral epidural stimulation for restoration of bladder function after spinal cord injury in rats

DOI: 10.26275/gvzt-oeti Dataset ID: 130 Dataset Version: 2

Citation: Hubscher, C., Harkema, S., Wagers, S., Mohamed, A., El-Baz, A., Ugiliweneza, B., Herrity, A., Johnson, K., Armstrong, J., Fell, J., Chen, Y., Zdunowski, S., Gallahar, A., Hargitt, J., Dougherty, S., Wade, S., Wyles, E., Hoey, R., Medina Aguiñaga, D., ... Chang, H. (2022). *Functional mapping with lumbosacral epidural stimulation for restoration of bladder function after spinal cord injury in rats* (Version 2) [Data set]. SPARC Portal. <https://doi.org/10.26275/GVZT-OETI>

Dataset Citations

DOI: doi:10.17504/protocols.io.w6hfhb6 [Protocol]

Citation: Hubscher, C., & Hoey, R. (2019). Epidural stimulation mapping protocol v1. <https://doi.org/10.17504/protocols.io.w6hfhb6>

DOI: doi:10.1038/s41598-021-81822-3 [Originating Publication]

Citation: Hoey, R. F., Medina-Aguirre, D., Khalifa, F., Ugiliweneza, B., Zdunowski, S., Fell, J., Naglah, A., El-Baz, A. S., Herrity, A. N., Harkema, S. J., & Hubscher, C. H. (2021). Bladder and bowel responses to lumbosacral epidural stimulation in uninjured and transected anesthetized rats. *Scientific Reports*, 11(1). <https://doi.org/10.1038/s41598-021-81822-3>

Transcriptional diversity of single neurons in the porcine right atrial ganglionic plexus (RAGP)

DOI: 10.26275/z6jn-j5tx **Dataset ID:** 119 **Dataset Version:** 2

Citation: Moss, A., Robbins, S., Achanta, S., Nieves, S., Turick, S., Schwaber, J., & Vadigepalli, R. (2022). *Transcriptional diversity of single neurons in the porcine right atrial ganglionic plexus (RAGP)* (Version 2) [Data set]. SPARC Portal. <https://doi.org/10.26275/Z6JN-J5TX>

Dataset Citations

DOI: doi:10.21203/rs.3.pex-927/v1 [Citation]

Citation: Robbins, S., Achanta, S., & Vadigepalli, R. (2021). Laser Capture Microdissection (LCM) and 3D Sample Tracking Protocol. <https://doi.org/10.21203/rs.3.pex-927/v1>

Antibodies tested in the colon - Pig

DOI: 10.26275/of13-iokw **Dataset ID:** 216 **Dataset Version:** 1

Citation: Yuan, P.-Q., Mazzuoli-Weber, G., Schemann, M., Sternini, C., Bains, M., & Tache, Y. (2022). *Antibodies tested in the colon - Pig* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/OF13-IOKW>

Dataset Citations

DOI: doi:10.17504/protocols.io.4r9gv96 [Protocol]

Citation: pq Yuan, P.-Q., & Tache, Y. (2019). Tache_Yuan_OT2OD024899_CLARITYAnd3DImagingOfColonicENSintheMouseAndPig_1_2019-Pig_Protocol v1. <https://doi.org/10.17504/protocols.io.4r9gv96>

DOI: doi:10.17504/protocols.io.bfqmjmu6 [Protocol]

Citation: Quantitative analysis of enteric neurons containing choline acetyltransferase and nitric oxide synthase immunoreactivities in the submucosal and myenteric plexuses of the porcine colon v1. (2020). <https://doi.org/10.17504/protocols.io.bfqmjmu6>

DOI: doi:10.17504/protocols.io.b4qrqv6 [Protocol]

Citation: Immunohistochemistry of porcine enteric neurons v1. (2022). <https://doi.org/10.17504/protocols.io.b4qrqv6>

Safety testing of predicate device for Fecobionics

DOI: 10.26275/dhbx-w17y **Dataset ID:** 187 **Dataset Version:** 2

Citation: Wang, Y., Patel, B., Kassab, G., & Gregersen, H. (2022). *Safety testing of predicate device for Fecobionics* (Version 2) [Data set]. SPARC Portal.

<https://doi.org/10.26275/DHBX-W17Y>

Dataset Citations

DOI: [doi:10.17504/protocols.io.b4u8qwzw](https://doi.org/10.17504/protocols.io.b4u8qwzw) [Protocol]

Citation: Staining Protocols for Safety Study of Wireless Fecobionics Device v1. (2022).

<https://doi.org/10.17504/protocols.io.b4u8qwzw>

Single nucleus RNAseq of nodose ganglia in mice

DOI: 10.26275/wucy-ljuk **Dataset ID: 220 Dataset Version: 1**

Citation: Verheyden, J., Sun, X., Xu, Y., & Zhao, S. (2022). *Single nucleus RNAseq of nodose ganglia in mice* (Version 1) [Data set]. SPARC Portal.

<https://doi.org/10.26275/WUCY-LJUK>

Dataset Citations

DOI: [doi:10.17504/protocols.io.v72e9qe](https://doi.org/10.17504/protocols.io.v72e9qe) [Protocol]

Citation: Preissl, S., Verheyden, J., & Sun, X. (2018). Single Nucleus RNAseq Sample Prep from Nodose Ganglia v1. <https://doi.org/10.17504/protocols.io.v72e9qe>

Effect of electrical stimulation of vagal afferent terminals located in the stomach muscle wall on feeding behavior

DOI: 10.26275/elbl-3vxh **Dataset ID: 46 Dataset Version: 2**

Citation: Phillips, R., Powley, T., Rajwa, B., Jaffey, D., Irazoqui, P., Tan, Z., Lu, K.-H., & Liu, Z. (2022). *Effect of electrical stimulation of vagal afferent terminals located in the stomach muscle wall on feeding behavior* (Version 2) [Data set]. SPARC Portal. <https://doi.org/10.26275/ELBL-3VXH>

Dataset Citations

DOI: [doi:10.17504/protocols.io.b2qgqdtw](https://doi.org/10.17504/protocols.io.b2qgqdtw) [Protocol]

Citation: Protocol for chronic implantation of patch electrodes on the gastric muscle wall of the rat v1. (2021). <https://doi.org/10.17504/protocols.io.b2qgqdtw>

Enteric nervous system expression profiling by high throughput scRNA-sequencing in human and mouse colon

DOI: 10.26275/cxej-bm2v **Dataset ID: 222 Dataset Version: 2**

Citation: Wright, C. M., Schneider, S., Smith-Edwards, K., Marfa, F. A., Leembruggen, A., Gonzalez, M. V., Kothakapa, D., Anderson, J., Maguire, B. A., Gao, T., Missall, T. A., Howard, M., Bornstein, J., Davis, B., & Heuckeroth, R. (2022). *Enteric nervous system expression profiling by high throughput scRNA-sequencing in human and mouse colon* (Version 2) [Data set]. SPARC Portal. <https://doi.org/10.26275/CXEJ-BM2V>

Dataset Citations

DOI: doi:10.17504/protocols.io.w26fghe [Protocol]

Citation: M Wright, C., & Robert O Heuckeroth, not provided. (2019). Processing Human Colon "Myenteric Plexus" for Single Nuclei RNA-seq v1. <https://doi.org/10.17504/protocols.io.w26fghe>

DOI: doi:10.1016/j.jcmgh.2020.12.014 [Originating Publication]

Citation: Wright, C. M., Schneider, S., Smith-Edwards, K. M., Mafra, F., Leembruggen, A. J. L., Gonzalez, M. V., Kothakapa, D. R., Anderson, J. B., Maguire, B. A., Gao, T., Missall, T. A., Howard, M. J., Bornstein, J. C., Davis, B. M., & Heuckeroth, R. O. (2021). scRNA-Seq Reveals New Enteric Nervous System Roles for GDNF, NRTN, and TBX3. *Cellular and Molecular Gastroenterology and Hepatology*, 11(5), 1548-1592.e1. <https://doi.org/10.1016/j.jcmgh.2020.12.014>

Spatially tracked single-cell-scale RNAseq of porcine right atrial ganglionic plexus (RAGP) neurons

DOI: 10.26275/az1n-uv7s **Dataset ID:** 116 **Dataset Version:** 2

Citation: Moss, A., Vadigepalli, R., Schwaber, J., Achanta, S., Robbins, S., & Kuttippurathu, L. (2022). *Spatially tracked single-cell-scale RNAseq of porcine right atrial ganglionic plexus (RAGP) neurons* (Version 2) [Data set]. SPARC Portal. <https://doi.org/10.26275/AZ1N-UV7S>

Dataset Citations

DOI: doi:10.21203/rs.3.pex-962/v1 [Citation]

Citation: Kuttippurathu, L., Moss, A., & Vadigepalli, R. (2021). Single Cell scale RNA-seq Analysis Protocol to analyze Smart-3SEQ data from RAGP neurons of pig heart. <https://doi.org/10.21203/rs.3.pex-962/v1>

Optogenetic inhibition of nitrergic and cholinergic neurons of murine colonic myenteric plexus

DOI: 10.26275/qska-awpu **Dataset ID:** 224 **Dataset Version:** 1

Citation: Heredia, D., & Gould, T. (2022). *Optogenetic inhibition of nitrergic and cholinergic neurons of murine colonic myenteric plexus* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/QSKP-AWPU>

Dataset Citations

DOI: doi:10.17504/protocols.io.bqppmvnm [Protocol]

Citation: Heredia, D., & Gould, T. (2020). Optogenetically inhibiting enteric neurons in the murine large intestine v1. <https://doi.org/10.17504/protocols.io.bqppmvnm>

CLARITY and three-dimensional (3D) imaging of the mouse and porcine colonic innervation

DOI: 10.26275/sip4-ioyz **Dataset ID:** 31 **Dataset Version:** 4

Citation: Yuan, P.-Q., Wang, L., Mulugeta, M., & Tache, Y. (2022). *CLARITY and three-dimensional (3D) imaging of the mouse and porcine colonic innervation* (Version 4) [Data set]. SPARC Portal. <https://doi.org/10.26275/SIP4-IOYZ>

Dataset Citations

DOI: doi:10.17504/protocols.io.4sagwae [Protocol]
Citation: pq Yuan, P.-Q., Wang, L., & TachÃ©, Y. (2019).
Tache_Yuan_OT2OD024899_CLARITYAnd3DImagingOfColonicENSintheMouseAndPig_1_2019-
Mouse_Protocol (Annotation Copy) v1. <https://doi.org/10.17504/protocols.io.4sagwae>

Sympathetic and parasympathetic effects on membrane currents in isolated pig ventricular myocytes

DOI: 10.26275/jsaw-2w1q **Dataset ID: 228 Dataset Version: 1**

Citation: Agarwal, S., & Harvey, R. (2022). *Sympathetic and parasympathetic effects on membrane currents in isolated pig ventricular myocytes* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/JSAW-2W1Q>

Dataset Citations

DOI: doi:10.17504/protocols.io.ba8iihue [Protocol]
Citation: Isolation of Adult Pig Ventricular Myocytes v1. (2020).
<https://doi.org/10.17504/protocols.io.ba8iihue>

DOI: doi:10.17504/protocols.io.ba8mihu6 [Protocol]
Citation: L-Type Ca²⁺ Current Protocol v1. (2020).
<https://doi.org/10.17504/protocols.io.ba8mihu6>

DOI: doi:10.1111/bph.15382 [Originating Publication]
Citation: Rudokas, M. W., Post, J. P., SatarayáRodríguez, A., Sherpa, R. T., Moshal, K. S., Agarwal, S. R., & Harvey, R. D. (2021). Compartmentation of β_2 adrenoceptor stimulated cAMP responses by phosphodiesterase types 2 and 3 in cardiac ventricular myocytes. *British Journal of Pharmacology*, 178(7), 1574â1587. Portico. <https://doi.org/10.1111/bph.15382>

Vagus nerve stimulation mapping in swine

DOI: 10.26275/qw1u-zxea **Dataset ID: 229 Dataset Version: 1**

Citation: Ludwig, K. A., Nicolai, E. N., Settell, M. L., Grill, W. M., & Pelot, N. A. (2022). *Vagus nerve stimulation mapping in swine* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/QW1U-ZXEA>

Dataset Citations

DOI: doi:10.17504/protocols.io.bkeyktfw [Protocol]
Citation: Vagus Nerve Stimulation Evoked Electroneurography and Electromyography Recordings in Swine v1. (2020). <https://doi.org/10.17504/protocols.io.bkeyktfw>

Calcium dynamics imaging of vasoactive intestinal peptide-expressing (VIP) enteric nervous system (ENS) neurons

DOI: 10.26275/zuwb-qnqk **Dataset ID: 231 Dataset Version: 1**

Citation: Margiotta, J., & Howard, M. (2022). *Calcium dynamics imaging of vasoactive intestinal peptide-expressing (VIP) enteric nervous system (ENS) neurons* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/ZUWB-QNQK>

Dataset Citations

DOI: doi:10.17504/protocols.io.14egn76xpv5d/v1 [Protocol]
Citation: Barth, B. B., Redington, E. R., Gautam, N., Pelot, N. A., & Grill, W. M. (2023). Calcium image analysis in the moving gut. *Neurogastroenterology & Motility*, 35(12). Portico.
<https://doi.org/10.17504/protocols.io.14egn76xpv5d/v1>

DOI: doi:10.1111/nmo.14678 [Citation]
Citation: Barth, B. B., Redington, E. R., Gautam, N., Pelot, N. A., & Grill, W. M. (2023). Calcium image analysis in the moving gut. *Neurogastroenterology & Motility*, 35(12). Portico.
<https://doi.org/10.1111/nmo.14678>

Rat vagus nerve TH- (tyrosine hydroxylase) and ChAT- (choline acetyltransferase) positive fibers

DOI: 10.26275/nav5-oeol **Dataset ID:** 233 **Dataset Version:** 1

Citation: Pelot, N. A., Ezzell, J. A., Cariello, J. E., Goldhagen, G. B., Clissold, K. A., & Grill, W. M. (2022). *Rat vagus nerve TH- (tyrosine hydroxylase) and ChAT- (choline acetyltransferase) positive fibers* (Version 1) [Data set]. SPARC Portal.
<https://doi.org/10.26275/NAV5-OEOL>

Dataset Citations

DOI: doi:10.17504/protocols.io.6hehb3e [Protocol]
Citation: Ashley Ezzell, J., A. Pelot, N., A. Clissold, K., & M. Grill, W. (2019). SPARC_Duke_Grill_OT2-OD025340_VagusNerve_IHC_TH v1.
<https://doi.org/10.17504/protocols.io.6hehb3e>

DOI: doi:10.17504/protocols.io.bi9tkh6n [Protocol]
Citation: Ashley Ezzell, J., A. Pelot, N., A. Clissold, K., & M. Grill, W. (2020). SPARC_Duke_Grill_OT2-OD025340_VagusNerve_IHC_ChAT v2.
<https://doi.org/10.17504/protocols.io.bi9tkh6n>

DOI: doi:10.17504/protocols.io.6hfhb3n [Protocol]
Citation: Ashley Ezzell, J., A. Pelot, N., A. Clissold, K., & M. Grill, W. (2019). SPARC_Duke_Grill_OT2-OD025340_VagusNerve_IHC_ChAT v1.
<https://doi.org/10.17504/protocols.io.6hfhb3n>

Human vagus nerve TH- (tyrosine hydroxylase) and ChAT- (choline acetyltransferase) positive fibers

DOI: 10.26275/x10i-9c9u **Dataset ID:** 234 **Dataset Version:** 1

Citation: Pelot, N. A., Ezzell, J. A., Cariello, J. E., Goldhagen, G. B., Clissold, K. A., & Grill, W. M. (2022). *Human vagus nerve TH- (tyrosine hydroxylase) and ChAT- (choline acetyltransferase) positive fibers* (Version 1) [Data set]. SPARC Portal.
<https://doi.org/10.26275/X10I-9C9U>

Dataset Citations

DOI: doi:10.17504/protocols.io.6hehb3e [Protocol]
Citation: Ashley Ezzell, J., A. Pelot, N., A. Clissold, K., & M. Grill, W. (2019).
SPARC_Duke_Grill_OT2-OD025340_VagusNerve_IHC_TH v1.
<https://doi.org/10.17504/protocols.io.6hehb3e>

DOI: doi:10.17504/protocols.io.6hfhb3n [Protocol]
Citation: Ashley Ezzell, J., A. Pelot, N., A. Clissold, K., & M. Grill, W. (2019).
SPARC_Duke_Grill_OT2-OD025340_VagusNerve_IHC_ChAT v1.
<https://doi.org/10.17504/protocols.io.6hfhb3n>

DOI: doi:10.17504/protocols.io.bi9tkh6n [Protocol]
Citation: Ashley Ezzell, J., A. Pelot, N., A. Clissold, K., & M. Grill, W. (2020).
SPARC_Duke_Grill_OT2-OD025340_VagusNerve_IHC_ChAT v2.
<https://doi.org/10.17504/protocols.io.bi9tkh6n>

High-density penetrating array dorsal root ganglia recordings

DOI: 10.26275/vzxw-kwdu **Dataset ID:** 236 **Dataset Version:** 1

Citation: Sperry, Z., Na, K., Vöröslakos, M., Parizi, S., Jun, J. J., Bruns, T., Yoon, E., & Seymour, J. (2022). *High-density penetrating array dorsal root ganglia recordings* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/VZXW-KWUDU>

Dataset Citations

DOI: doi:10.17504/protocols.io.w5nfg5e [Protocol]
Citation: J Sperry, Z., Na, K., Vöröslakos, M., Parizi, S., Jun, J., M. Bruns, T., Yoon, E., & P. Seymour, J. (2019). High-Density Penetrating Microelectrode Recordings from Anesthetized Feline Dorsal Root Ganglia v1. <https://doi.org/10.17504/protocols.io.w5nfg5e>

DOI: doi:10.1038/s41378-020-0149-z [Originating Publication]
Citation: Na, K., Sperry, Z. J., Lu, J., Vöröslakos, M., Parizi, S. S., Bruns, T. M., Yoon, E., & Seymour, J. P. (2020). Novel diamond shuttle to deliver flexible neural probe with reduced tissue compression. *Microsystems & Nanoengineering*, 6(1). <https://doi.org/10.1038/s41378-020-0149-z>

Ablation of the intrinsic cardiac nervous system to evaluate efferent control of cardiac function

DOI: 10.26275/rmkt-5ypu **Dataset ID:** 237 **Dataset Version:** 1

Citation: Hanna, P., Dacey, M., Swid, A., & Shivkumar, K. (2022). *Ablation of the intrinsic cardiac nervous system to evaluate efferent control of cardiac function* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/RMKT-5YPU>

Dataset Citations

DOI: doi:10.17504/protocols.io.bvpbn5in [Protocol]
Citation: Evaluating intrinsic cardiac neural control of cardiac function using sequential ganglionated plexus ablations v1. (2021). <https://doi.org/10.17504/protocols.io.bvpbn5in>

DOI: doi:10.1161/CIRCRESAHA.120.318458 [Originating Publication]
Citation: Hanna, P., Dacey, M. J., Brennan, J., Moss, A., Robbins, S., Achanta, S., Biscola, N. P., Swid, M. A., Rajendran, P. S., Mori, S., Hadaya, J. E., Smith, E. H., Peirce, S. G., Chen, J., Havton, L. A., Cheng, Z. (Jack), Vadigepalli, R., Schwaber, J., Lux, R. L., & Shivkumar, K. (2021). Innervation and Neuronal Control of the Mammalian Sinoatrial Node a Comprehensive Atlas. *Circulation Research*, 128(9), 1279-1296. <https://doi.org/10.1161/circresaha.120.318458>

Temporal dispersion in porcine subdiaphragmatic nerves ex vivo

DOI: 10.26275/4mfy-y7bj Dataset ID: 239 Dataset Version: 1

Citation: Tarotin, I., Mastitskaya, S., Ravagli, E., holder, david, & Aristovich, K. (2022). *Temporal dispersion in porcine subdiaphragmatic nerves ex vivo* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/4MFY-Y7BJ>

Dataset Citations

DOI: doi:10.17504/protocols.io.b59hq936 [Protocol]
Citation: Tarotin, I., Mastitskaya, S., Ravagli, E., D Perkins, J., S Holder, D., & Aristovich, K. (2022). Measurement of activity-related impedance changes in porcine subdiaphragmatic nerve v2. <https://doi.org/10.17504/protocols.io.b59hq936>

Mapping colon and bladder innervating sensory neurons in CLARITY cleared ganglia in mouse

DOI: 10.26275/be0x-9mzy Dataset ID: 238 Dataset Version: 1

Citation: Brierley, S. M., & Harrington, A. (2023). *Mapping colon and bladder innervating sensory neurons in CLARITY cleared ganglia in mouse* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/BE0X-9MZY>

Dataset Citations

DOI: doi:10.17504/protocols.io.x54v9y391g3e/v1 [Protocol]
Citation: Harrington, A. (2022). Cholera Toxin Subunit B (CTB) Retrograde tracing from the mouse colon and bladder wall. v1. <https://doi.org/10.17504/protocols.io.x54v9y391g3e/v1>

DOI: doi:10.17504/protocols.io.j8nlkk971l5r/v2 [Protocol]
Citation: Harrington, A. (2022). Mapping dichotomising colon and bladder sensory afferent neurons and terminals and if they undergo structural plasticity post-colitis. v2. <https://doi.org/10.17504/protocols.io.j8nlkk971l5r/v2>

DOI: doi:10.17504/protocols.io.14egn7mpqv5d/v1 [Protocol]
Citation: Harrington, A. (2022). Mouse model of post-colitis (DNBS) chronic visceral hypersensitivity. v1. <https://doi.org/10.17504/protocols.io.14egn7mpqv5d/v1>

Imaging colon and bladder sensory convergence in CLARITY cleared mouse spinal cord

DOI: 10.26275/iyto-oxay Dataset ID: 240 Dataset Version: 1

Citation: Brierley, S. M., & Harrington, A. (2023). *Imaging colon and bladder sensory convergence in CLARITY cleared mouse spinal cord* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/IYTO-OXAY>

Dataset Citations

DOI: doi:10.17504/protocols.io.x54v9y391g3e/v1 [Protocol]
Citation: Harrington, A. (2022). Cholera Toxin Subunit B (CTB) Retrograde tracing from the mouse colon and bladder wall. v1. <https://doi.org/10.17504/protocols.io.x54v9y391g3e/v1>

DOI: doi:10.17504/protocols.io.j8nlkk971l5r/v2 [Protocol]
Citation: Harrington, A. (2022). Mapping dichotomising colon and bladder sensory afferent neurons and terminals and if they undergo structural plasticity post-colitis. v2. <https://doi.org/10.17504/protocols.io.j8nlkk971l5r/v2>

Evaluating spheres of influence for efferent neural control of the heart

DOI: 10.26275/wcli-rv5b Dataset ID: 241 Dataset Version: 1

Citation: Hanna, P., Dacey, M., Swid, A., & Ardell, J. (2022). *Evaluating spheres of influence for efferent neural control of the heart* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/WCLI-RV5B>

Dataset Citations

DOI: doi:10.17504/protocols.io.bvpbn5in [Protocol]

Citation: Evaluating intrinsic cardiac neural control of cardiac function using sequential ganglionated plexus ablations v1. (2021). <https://doi.org/10.17504/protocols.io.bvpbn5in>

Calcium imaging and motility tracking of distinct myenteric neuronal subsets in mice

DOI: 10.26275/x0oc-7oc5 Dataset ID: 242 Dataset Version: 1

Citation: Heredia, D., & Gould, T. (2022). *Calcium imaging and motility tracking of distinct myenteric neuronal subsets in mice* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/X0OC-7OC5>

Dataset Citations

DOI: doi:10.17504/protocols.io.82fhybn [Protocol]

Citation: Imaging and stimulating enteric neurons in the murine large intestine v1. (2019). <https://doi.org/10.17504/protocols.io.82fhybn>

Dorsal root ganglion stimulation to modulate mechanosensitive colorectal afferent transmission in mice

DOI: 10.26275/36ua-upkq Dataset ID: 243 Dataset Version: 1

Citation: Feng, B. (2022). *Dorsal root ganglion stimulation to modulate mechanosensitive colorectal afferent transmission in mice* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/36UA-UPKQ>

Dataset Citations

DOI: doi:10.17504/protocols.io.36wgq7b4ovk5/v1 [Protocol]

Citation: Chen, L. (2022). Synchronized spinal nerve and dorsal root ganglia stimulation v1. <https://doi.org/10.17504/protocols.io.36wgq7b4ovk5/v1>

Assessment of gastric emptying and motility with magnetic resonance imaging (MRI) under gastric electrical stimulation (GES) in rats

DOI: 10.26275/iwxw-y2tz Dataset ID: 244 Dataset Version: 1

Citation: Lu, K.-H., Powley, T. L., Liu, Z., Jaffey, D., & Rajwa, B. (2022). *Assessment of gastric emptying and motility with magnetic resonance imaging (MRI) under gastric electrical stimulation (GES) in rats* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/IWXW-Y2TZ>

Dataset Citations

DOI: doi:10.17504/protocols.io.bawfifbn [Protocol]

Citation: Effects of Vagus Nerve Stimulation/Gastric Electrical Stimulation on Gastric Emptying and Motility Assessed with Magnetic Resonance Imaging v1. (2019).

<https://doi.org/10.17504/protocols.io.bawfifbn>

Dorsal root ganglion stimulation to modulate mechanosensitive colorectal afferent transmission

DOI: 10.26275/ya41-6sfo Dataset ID: 245 Dataset Version: 1

Citation: Feng, B. (2022). *Dorsal root ganglion stimulation to modulate mechanosensitive colorectal afferent transmission* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/YA41-6SFO>

Dataset Citations

DOI: doi:10.17504/protocols.io.bp2l61rnzvsqe/v1 [Protocol]

Citation: Chen, L. (2022). Dorsal Root Ganglia stimulation-block colorectal afferents v1.

<https://doi.org/10.17504/protocols.io.bp2l61rnzvsqe/v1>

Activity of and neurochemical expression in nitrergic and cholinergic neurons in the murine colonic myenteric plexus

DOI: 10.26275/tscp-vk1d Dataset ID: 246 Dataset Version: 1

Citation: Heredia, D., Gould, T., & Smith, T. (2022). *Activity of and neurochemical expression in nitrergic and cholinergic neurons in the murine colonic myenteric plexus* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/TSCP-VK1D>

Dataset Citations

DOI: doi:10.17504/protocols.io.82fhybn [Protocol]

Citation: Imaging and stimulating enteric neurons in the murine large intestine v1. (2019).

<https://doi.org/10.17504/protocols.io.82fhybn>

DOI: doi:10.1111/nmo.14678 [Citation]

Citation: Barth, B. B., Redington, E. R., Gautam, N., Pelot, N. A., & Grill, W. M. (2023). Calcium image analysis in the moving gut. *Neurogastroenterology & Motility*, 35(12). Portico.

<https://doi.org/10.1111/nmo.14678>

In vivo visualization of pig vagus nerve 'vagotomy' using ultrasound

DOI: 10.26275/i6uj-vhx8 Dataset ID: 252 Dataset Version: 1

Citation: Ludwig, K. A., Settell, M. L., Skubal, A. C., Chen, R. C., Kasole, M., Knudsen, B. E., Nicolai, E. N., Trevathan, J. K., Upadhye, A., Shoffstall, A. J., Williams, J. C., Suminski, A., Grill, W. M., & Pelot, N. A. (2022). *In vivo visualization of pig vagus nerve 'vagotomy' using ultrasound* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/I6UJ-VHX8>

Dataset Citations

DOI: doi:10.17504/protocols.io.9ieh4be [Protocol]
Citation: Settell, M., E Knudsen, B., L McConico, A., & A Ludwig, K. (2019). Protocol for Pig Vagus Nerve Microdissection and Histology v1. <https://doi.org/10.17504/protocols.io.9ieh4be>

DOI: doi:10.17504/protocols.io.bp2l61m4zvqe/v1 [Protocol]
Citation: Methods for Visualization of Pig Vagus Nerve "Vagotomy" Using Ultrasound v1. (2022). <https://doi.org/10.17504/protocols.io.bp2l61m4zvqe/v1>

Performance testing of the Fecobionics device

DOI: 10.26275/jr6t-jcoe **Dataset ID:** 253 **Dataset Version:** 1

Citation: Wang, Y., Patel, B., Gregersen, H., & Kassab, G. (2022). *Performance testing of the Fecobionics device* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/JR6T-JCOE>

Dataset Citations

DOI: doi:10.17504/protocols.io.bpzfmp3n [Protocol]
Citation: Performance Study of Wireless Fecobionics Device in Canine v1. (2020). <https://doi.org/10.17504/protocols.io.bpzfmp3n>

DOI: doi:10.1053/j.gastro.2020.09.055 [Originating Publication]
Citation: Gregersen, H., Wang, Y., Guo, X., Field, F., Nelson, M., Combs, W., Wang, M., & Kassab, G. (2021). Simulated Colonic Feces Reveals Novel Contraction Patterns. *Gastroenterology*, 160(3), 660â662. <https://doi.org/10.1053/j.gastro.2020.09.055>

Electrochemical measurement of kanamycin in whole blood for implant longevity evaluation

DOI: 10.26275/akxk-vcbm **Dataset ID:** 254 **Dataset Version:** 1

Citation: Soh, H. T., Chien, J.-C., & Rangel, A. (2022). *Electrochemical measurement of kanamycin in whole blood for implant longevity evaluation* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/AKXK-VCBM>

Dataset Citations

DOI: doi:10.17504/protocols.io.j8nlk5dydl5r/v1 [Protocol]
Citation: Chien, J.-C. (2019). Wireless electrochemical measurement of kanamycin in whole blood v1. <https://doi.org/10.17504/protocols.io.j8nlk5dydl5r/v1>

Substance P-immunoreactive axon innervation of mouse stomach

DOI: 10.26275/jrj4-zrmj **Dataset ID:** 256 **Dataset Version:** 1

Citation: Nguyen, D., Mistareehi, A., Ma, J., Madas, J., Kwiat, A. M., Bendowski, K., Chen, J., Li, D.-P., Furness, J., Powley, T. L., & Cheng, Z. (2022). *Substance P-immunoreactive axon innervation of mouse stomach* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/JRJ4-ZRMJ>

Dataset Citations

DOI: doi:10.17504/protocols.io.j8nlkkn5l5r/v1 [Protocol]
Citation: Topographical Organization, Morphology, and Density Analysis of Substance P (SP)-IR axons in the Whole Mouse Stomach v1. (2022). <https://doi.org/10.17504/protocols.io.j8nlkkn5l5r/v1>

Increased arrhythmia susceptibility in type 2 diabetic mice related to dysregulation of ventricular sympathetic innervation

DOI: 10.26275/dtlj-t4bf **Dataset ID:** 257 **Dataset Version:** 1

Citation: Tompkins, J. D. (2022). *Increased arrhythmia susceptibility in type 2 diabetic mice related to dysregulation of ventricular sympathetic innervation* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/DTLJ-T4BF>

Dataset Citations

DOI: doi:10.17504/protocols.io.81wgb6ep3lpk/v1 [Protocol]
Citation: D Tompkins, J. (2022). Protocol for intracellular recording from mouse intrinsic cardiac neurons v1. <https://doi.org/10.17504/protocols.io.81wgb6ep3lpk/v1>

4D upper gastrointestinal magnetic resonance imaging in healthy human subjects and gastroparetic patients

DOI: 10.26275/23je-ute3 **Dataset ID:** 258 **Dataset Version:** 1

Citation: Lu, K.-H., Mosier, K., Liu, Z., Wo, J., Gupta, A., Jarrett, M., Putzke, T., Jaffey, D., Cao, J., Wang, X., Rajwa, B., & Powley, T. L. (2023). *4D upper gastrointestinal magnetic resonance imaging in healthy human subjects and gastroparetic patients* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/23JE-UTE3>

Dataset Citations

DOI: doi:10.17504/protocols.io.kxygpx9dl8j/v1 [Protocol]
Citation: 4D Upper Gastrointestinal Magnetic Resonance Imaging in Healthy Human Subjects and Gastroparetic Patients v1. (2021). <https://doi.org/10.17504/protocols.io.kxygpx9dl8j/v1>

Expression of molecular markers in mouse and human stellate ganglia

DOI: 10.26275/vkvk-3hqe **Dataset ID:** 260 **Dataset Version:** 1

Citation: Lee, S., Lafond, A. J., & Zeltser, L. (2022). *Expression of molecular markers in mouse and human stellate ganglia* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/VKVK-3HQE>

Dataset Citations

DOI: doi:10.17504/protocols.io.rm7vzyko5lx1/v1 [Protocol]
Citation: Neri, D. (2022). Expression of molecular markers in mouse and human stellate ganglia v1. <https://doi.org/10.17504/protocols.io.rm7vzyko5lx1/v1>

Expression of molecular markers in subpopulations of mouse stellate ganglion neurons

DOI: 10.26275/zly9-ow0w **Dataset ID:** 261 **Dataset Version:** 1

Citation: Lee, S., Lafond, A. J., & Zeltser, L. (2022). *Expression of molecular markers in subpopulations of mouse stellate ganglion neurons* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/ZLY9-OW0W>

Dataset Citations

DOI: [doi:10.17504/protocols.io.8epv592bdg1b/v1](https://doi.org/10.17504/protocols.io.8epv592bdg1b/v1) [Protocol]
Citation: Neri, D. (2022). Expression of molecular markers in subpopulations of mouse stellate ganglion neurons v1. <https://doi.org/10.17504/protocols.io.8epv592bdg1b/v1>

Electrode design characterization for electrophysiology from swine peripheral nervous system

DOI: [10.26275/vm1h-k4kq](https://doi.org/10.26275/vm1h-k4kq) Dataset ID: 262 Dataset Version: 1

Citation: Ludwig, K. A., & Verma, N. (2022). *Electrode design characterization for electrophysiology from swine peripheral nervous system* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/VM1H-K4KQ>

Dataset Citations

DOI: [doi:10.17504/protocols.io.j8nlkk6n5l5r/v1](https://doi.org/10.17504/protocols.io.j8nlkk6n5l5r/v1) [Protocol]
Citation: Electrophysiology from cervical vagus nerve and great auricular nerve in swine v1. (2022). <https://doi.org/10.17504/protocols.io.j8nlkk6n5l5r/v1>

DOI: [doi:10.1088/1741-2552/acc35c](https://doi.org/10.1088/1741-2552/acc35c) [Citation]
Citation: Verma, N., Knudsen, B., Gholston, A., Skubal, A., Blanz, S., Settell, M., Frank, J., Trevathan, J., & Ludwig, K. (2023). Microneurography as a minimally invasive method to assess target engagement during neuromodulation. *Journal of Neural Engineering*, 20(2), 026036. <https://doi.org/10.1088/1741-2552/acc35c>

DOI: <https://doi.org/10.26275/vm1h-k4kq> [Citation]
Citation: Ludwig, K. A., & Verma, N. (2022). *Electrode design characterization for electrophysiology from swine peripheral nervous system* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/VM1H-K4KQ>

Single cell RNA sequencing of retrogradely labeled mouse stellate ganglion neurons

DOI: [10.26275/bvpu-cuz7](https://doi.org/10.26275/bvpu-cuz7) Dataset ID: 263 Dataset Version: 1

Citation: Lee, S., Thaker, V., & Zeltser, L. (2022). *Single cell RNA sequencing of retrogradely labeled mouse stellate ganglion neurons* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/BVPU-CUZ7>

Dataset Citations

DOI: doi:10.17504/protocols.io.wjrjcm6 [Protocol]
Citation: Lee, S., & Zeltser, L. (2018). Retrograde labeling of brown adipose tissue (BAT)-projecting sympathetic neurons with cholera toxin B (CTB) v1.
<https://doi.org/10.17504/protocols.io.wjrjcm6>

DOI: doi:10.17504/protocols.io.14egn79e6v5d/v1 [Protocol]
Citation: Lee, S. (2022). Ganglia dissociation and single-cell sorting v1.
<https://doi.org/10.17504/protocols.io.14egn79e6v5d/v1>

DOI: doi:10.17504/protocols.io.bp2l61drdvqe/v1 [Protocol]
Citation: Neri, D. (2022). Single-cell sequencing and analysis v1.
<https://doi.org/10.17504/protocols.io.bp2l61drdvqe/v1>

DOI: doi:10.17504/protocols.io.261generdg47/v1 [Protocol]
Citation: Single cell RNA sequencing of retrogradely labeled mouse stellate ganglion neuron v1. (2022). <https://doi.org/10.17504/protocols.io.261generdg47/v1>

Optical mapping of action potentials and calcium transients in the mouse heart during optogenetic stimulation of the intracardiac ganglia and interconnecting neurons (ICNS)

DOI: 10.26275/pfjd-cfty Dataset ID: 264 Dataset Version: 1

Citation: Rajendran, P., Salama, G., Zhu, C., Hanna, P., & Ardell, J. (2022). *Optical mapping of action potentials and calcium transients in the mouse heart during optogenetic stimulation of the intracardiac ganglia and interconnecting neurons (ICNS)* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/PFJD-CFTY>

Dataset Citations

DOI: doi:10.17504/protocols.io.bcdtis6n [Protocol]
Citation: Dual Optical Mapping of Action Potentials and Calcium Transients in the Mouse Heart during Optogenetic Stimulation of the ICNS v1. (2020).
<https://doi.org/10.17504/protocols.io.bcdtis6n>

Expression of molecular markers in subpopulations of mouse celiac ganglion neurons

DOI: 10.26275/s3iw-km0k Dataset ID: 265 Dataset Version: 1

Citation: Lee, S., Lafond, A. J., & Zeltser, L. (2022). *Expression of molecular markers in subpopulations of mouse celiac ganglion neurons* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/S3IW-KM0K>

Dataset Citations

DOI: doi:10.17504/protocols.io.8epv592bdg1b/v1 [Protocol]
Citation: Neri, D. (2022). Expression of molecular markers in subpopulations of mouse stellate ganglion neurons v1. <https://doi.org/10.17504/protocols.io.8epv592bdg1b/v1>

Expression of molecular markers in subpopulations of mouse superior cervical ganglion neurons

DOI: 10.26275/eedx-wrhi Dataset ID: 266 Dataset Version: 1

Citation: Lee, S., Lafond, A. J., & Zeltser, L. (2022). *Expression of molecular markers in subpopulations of mouse superior cervical ganglion neurons* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/EEDX-WRHI>

Dataset Citations

DOI: [doi:10.17504/protocols.io.8epv592bdg1b/v1](https://doi.org/10.17504/protocols.io.8epv592bdg1b/v1) [Protocol]
Citation: Neri, D. (2022). *Expression of molecular markers in subpopulations of mouse stellate ganglion neurons v1*. <https://doi.org/10.17504/protocols.io.8epv592bdg1b/v1>

Central terminal fields of lower urinary tract afferents in rat

DOI: 10.26275/yt5s-pt6t **Dataset ID:** 268 **Dataset Version:** 1

Citation: Fuller-Jackson, J.-P., Osborne, P., & Keast, J. R. (2022). *Central terminal fields of lower urinary tract afferents in rat* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/YT5S-PT6T>

Dataset Citations

DOI: [doi:10.17504/protocols.io.w3efgje](https://doi.org/10.17504/protocols.io.w3efgje) [Protocol]
Citation: R Keast, J., & B Osborne, P. (2019). Immunohistochemical analysis of ganglion neurons innervating the lower urinary tract [keast-001-stage03] v1. <https://doi.org/10.17504/protocols.io.w3efgje>

DOI: [doi:10.17504/protocols.io.b2ueqete](https://doi.org/10.17504/protocols.io.b2ueqete) [Protocol]
Citation: Fuller-Jackson, J.-P., B Osborne, P., & R Keast, J. (2021). Visualizing lower urinary tract afferent projections in the lumbosacral spinal cord in rats v1. <https://doi.org/10.17504/protocols.io.b2ueqete>

Acute effects of gastric electrical stimulation settings on neural activity in the nucleus of solitary tract in rats

DOI: 10.26275/z4wa-dxjx **Dataset ID:** 247 **Dataset Version:** 2

Citation: Cao, J., Powley, T. L., Liu, Z., Jaffey, D., & Rajwa, B. (2022). *Acute effects of gastric electrical stimulation settings on neural activity in the nucleus of solitary tract in rats* (Version 2) [Data set]. SPARC Portal. <https://doi.org/10.26275/Z4WA-DXJX>

Dataset Citations

DOI: [doi:10.17504/protocols.io.4r3l2okzjv1y/v1](https://doi.org/10.17504/protocols.io.4r3l2okzjv1y/v1) [Protocol]
Citation: The Acute Effects of Gastric Electrical Stimulation on Nucleus of the Solitary Tract Neural Activity Assessed with Electrophysiological Recording v1. (2022). <https://doi.org/10.17504/protocols.io.4r3l2okzjv1y/v1>

Effect of chronic gastric electrical stimulation on the feeding behavior of female rats consuming a 45% high-fat diet

DOI: 10.26275/y4k2-mkam **Dataset ID:** 269 **Dataset Version:** 1

Citation: Phillips, R., Powley, T. L., Rajwa, B., & Jaffey, D. (2022). *Effect of chronic gastric electrical stimulation on the feeding behavior of female rats consuming a*

45% high-fat diet (Version 1) [Data set]. SPARC Portal.
<https://doi.org/10.26275/Y4K2-MKAM>

Dataset Citations

DOI: doi:10.17504/protocols.io.b2qgqdtw [Protocol]
Citation: Protocol for chronic implantation of patch electrodes on the gastric muscle wall of the rat v1. (2021). <https://doi.org/10.17504/protocols.io.b2qgqdtw>

Effects of vagal efferent blockade on gastric motility and emptying during cervical vagus nerve stimulation measured with magnetic resonance imaging in rats

DOI: 10.26275/r5gw-clgv Dataset ID: 270 Dataset Version: 1

Citation: Lu, K.-H., Powley, T. L., Liu, Z., Jaffey, D., & Rajwa, B. (2022). *Effects of vagal efferent blockade on gastric motility and emptying during cervical vagus nerve stimulation measured with magnetic resonance imaging in rats* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/R5GW-CLGV>

Dataset Citations

DOI: doi:10.17504/protocols.io.bawfifbn [Protocol]
Citation: Effects of Vagus Nerve Stimulation/Gastric Electrical Stimulation on Gastric Emptying and Motility Assessed with Magnetic Resonance Imaging v1. (2019).
<https://doi.org/10.17504/protocols.io.bawfifbn>

In vivo mapping of gastric electrical activation with manganese enhanced magnetic resonance imaging

DOI: 10.26275/adzn-2fes Dataset ID: 271 Dataset Version: 1

Citation: Lu, K.-H., Powley, T. L., Liu, Z., Jaffey, D., & Rajwa, B. (2022). *In vivo mapping of gastric electrical activation with manganese enhanced magnetic resonance imaging* (Version 1) [Data set]. SPARC Portal.
<https://doi.org/10.26275/ADZN-2FES>

Dataset Citations

DOI: doi:10.17504/protocols.io.wvxfe7n [Protocol]
Citation: Lu, K.-H., Liu, Z., & Cao, J. (2019). Contrast-enhanced magnetic resonance imaging of gastric emptying and motility in rats v1. <https://doi.org/10.17504/protocols.io.wvxfe7n>

DOI: doi:10.17504/protocols.io.bawfifbn [Protocol]
Citation: Effects of Vagus Nerve Stimulation/Gastric Electrical Stimulation on Gastric Emptying and Motility Assessed with Magnetic Resonance Imaging v1. (2019).
<https://doi.org/10.17504/protocols.io.bawfifbn>

Effects of vagal afferent blockade on gastric motility during cervical vagus nerve stimulation measured with magnetic resonance imaging in rats

DOI: 10.26275/spcl-epsl **Dataset ID:** 272 **Dataset Version:** 1

Citation: Lu, K.-H., Jaffey, D., Rajwa, B., Powley, T. L., & Liu, Z. (2022). *Effects of vagal afferent blockade on gastric motility during cervical vagus nerve stimulation measured with magnetic resonance imaging in rats* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/SPCL-EPSL>

Dataset Citations

DOI: doi:10.17504/protocols.io.bawfifbn [Protocol]
Citation: Effects of Vagus Nerve Stimulation/Gastric Electrical Stimulation on Gastric Emptying and Motility Assessed with Magnetic Resonance Imaging v1. (2019).
<https://doi.org/10.17504/protocols.io.bawfifbn>

Effect of chronic gastric electrical stimulation on the feeding behavior of male rats consuming a 45% high-fat diet

DOI: 10.26275/ebql-cdno **Dataset ID:** 273 **Dataset Version:** 1

Citation: Phillips, R., Powley, T. L., Rajwa, B., Jaffey, D., Tan, Z., & Ward, M. (2022). *Effect of chronic gastric electrical stimulation on the feeding behavior of male rats consuming a 45% high-fat diet* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/EBQL-CDNO>

Dataset Citations

DOI: doi:10.17504/protocols.io.b2qqgdtw [Protocol]
Citation: Protocol for chronic implantation of patch electrodes on the gastric muscle wall of the rat v1. (2021). <https://doi.org/10.17504/protocols.io.b2qqgdtw>

Correlated electrophysiological immunohistochemical and morphological properties of proximal colon myenteric neurons

DOI: 10.26275/umgm-rzar **Dataset ID:** 274 **Dataset Version:** 1

Citation: Gwynne, R. M., & Koussoulas, K. (2022). *Correlated electrophysiological immunohistochemical and morphological properties of proximal colon myenteric neurons* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/UMGM-RZAR>

Dataset Citations

DOI: doi:10.17504/protocols.io.e6nvwkp97vmk/v1 [Protocol]
Citation: Intracellular recordings and post hoc immunofluorescence v1. (2021).
<https://doi.org/10.17504/protocols.io.e6nvwkp97vmk/v1>

Scaffold map - Influence of direct colon tissue electrical stimulation on colonic motility in anesthetized male Yucatan minipig

DOI: 10.26275/mxnk-4tvt **Dataset ID:** 259 **Dataset Version:** 3

Citation: Lin, M., Sorby, H., & Hunter, P. (2022). *Scaffold map - Influence of direct colon tissue electrical stimulation on colonic motility in anesthetized male Yucatan*

minipig (Version 3) [Data set]. SPARC Portal. <https://doi.org/10.26275/MXNK-4TVT>

Dataset Citations

DOI: [doi:10.17504/protocols.io.n2bvj6o35lk5/v2](https://doi.org/10.17504/protocols.io.n2bvj6o35lk5/v2) [Protocol]
Citation: Scaffold Mapping Protocol - Version 1.1.0 v2. (2022).
<https://doi.org/10.17504/protocols.io.n2bvj6o35lk5/v2>

Chronic wireless Urological Monitor of Conscious Activity (UroMOCA) implantation in feline bladder

DOI: 10.26275/wcwr-hmch **Dataset ID:** 120 **Dataset Version:** 2

Citation: Damaser, M., Bourbeau, D., Majerus, S., McAdams, I., Rietsch, A., Hanzlcek, B., Deng, K., & Yang, J. (2022). *Chronic wireless Urological Monitor of Conscious Activity (UroMOCA) implantation in feline bladder* (Version 2) [Data set]. SPARC Portal. <https://doi.org/10.26275/WCWR-HMCH>

Dataset Citations

DOI: [doi:10.17504/protocols.io.bf2kjqcw](https://doi.org/10.17504/protocols.io.bf2kjqcw) [Protocol]
Citation: SPARC Cat acute UroMOCA implantation v1. (2020).
<https://doi.org/10.17504/protocols.io.bf2kjqcw>

DOI: [doi:10.17504/protocols.io.bf2pjqdn](https://doi.org/10.17504/protocols.io.bf2pjqdn) [Protocol]
Citation: SPARC Cat acute UroMOCA implantation surgery v1. (2020).
<https://doi.org/10.17504/protocols.io.bf2pjqdn>

Identification of peripheral neural circuits that regulate heart rate using optogenetic and viral vector strategies

DOI: 10.26275/pbrd-ci3l **Dataset ID:** 32 **Dataset Version:** 4

Citation: Rajendran, P., Challis, R., Fowlkes, C., Hanna, P., Tompkins, J. D., Jordan, M., Hiyari, S., Gabris-Weber, B., Greenbaum, A., Chan, K., Deverman, B., Muenzberg, H., Ardell, J., Salama, G., Gradinaru, V., & Shivkumar, K. (2022). *Identification of peripheral neural circuits that regulate heart rate using optogenetic and viral vector strategies* (Version 4) [Data set]. SPARC Portal. <https://doi.org/10.26275/PBRD-CI3L>

Dataset Citations

DOI: doi:10.17504/protocols.io.x3sfqne [Protocol]
Citation: Rajendran, P. (2019). iDISCO clearing of mouse heart v1.
<https://doi.org/10.17504/protocols.io.x3sfqne>

DOI: doi:10.1038/s41467-019-09770-1 [Originating Publication]
Citation: Rajendran, P. S., Challis, R. C., Fowlkes, C. C., Hanna, P., Tompkins, J. D., Jordan, M. C., Hiyari, S., Gabris-Weber, B. A., Greenbaum, A., Chan, K. Y., Deverman, B. E., MÄnzberg, H., Ardell, J. L., Salama, G., Gradinaru, V., & Shivkumar, K. (2019). Identification of peripheral neural circuits that regulate heart rate using optogenetic and viral vector strategies. *Nature Communications*, 10(1). <https://doi.org/10.1038/s41467-019-09770-1>

DOI: doi:10.1038/s41596-018-0097-3 [Citation]
Citation: Challis, R. C., Ravindra Kumar, S., Chan, K. Y., Challis, C., Beadle, K., Jang, M. J., Kim, H. M., Rajendran, P. S., Tompkins, J. D., Shivkumar, K., Deverman, B. E., & Gradinaru, V. (2019). Systemic AAV vectors for widespread and targeted gene delivery in rodents. *Nature Protocols*, 14(2), 379â414. <https://doi.org/10.1038/s41596-018-0097-3>

Lower urinary tract nerve responses to high-density epidural spinal cord stimulation in cats

DOI: 10.26275/hbuu-caud **Dataset ID:** 279 **Dataset Version:** 1

Citation: Jantz, M., Gopinath, C., Kumar, R., Gaunt, R., & McLaughlin, B. (2022). *Lower urinary tract nerve responses to high-density epidural spinal cord stimulation in cats* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/HBUU-CAUD>

Dataset Citations

DOI: doi:10.17504/protocols.io.xszfnf6 [Protocol]
Citation: SPARC RNEL Bladder January 2019 protocol v1. (2019).
<https://doi.org/10.17504/protocols.io.xszfnf6>

DOI: doi:10.1088/1741-2552/aca0c2 [Citation]
Citation: Jantz, M. K., Gopinath, C., Kumar, R., Chin, C., Wong, L., Ogren, J. I., Fisher, L. E., McLaughlin, B. L., & Gaunt, R. A. (2022). High-density spinal cord stimulation selectively activates lower urinary tract nerves. *Journal of Neural Engineering*, 19(6), 066014.
<https://doi.org/10.1088/1741-2552/aca0c2>

DOI: doi:<https://doi.org/10.26275/hbuu-caud> [Citation]
Citation: Jantz, M., Gopinath, C., Kumar, R., Gaunt, R., & McLaughlin, B. (2022). *Lower urinary tract nerve responses to high-density epidural spinal cord stimulation in cats* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/HBUU-CAUD>

RNA sequencing analysis of transcriptomic responses to vagal nerve stimulation in myenteric ganglia of porcine colon

DOI: 10.26275/eikd-dg5c **Dataset ID:** 282 **Dataset Version:** 1

Citation: Li, T., Yuan, P.-Q., & Tache, Y. (2022). *RNA sequencing analysis of transcriptomic responses to vagal nerve stimulation in myenteric ganglia of porcine colon* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/EIKD-DG5C>

Dataset Citations

DOI: doi:10.17504/protocols.io.eq2lynmeqv9/v1 [Protocol]
Citation: Li, T. (2022). RNA sequencing analysis of transcriptomic responses to vagal nerve stimulation in myenteric ganglia of porcine colon v1.
<https://doi.org/10.17504/protocols.io.eq2lynmeqv9/v1>

Calcium imaging tension recordings and pelet transit in mouse colon in response to direct electrical field stimulation

DOI: 10.26275/qmg0-zbde **Dataset ID:** 283 **Dataset Version:** 1

Citation: Heredia, D., & Gould, T. (2024). *Calcium imaging tension recordings and pelet transit in mouse colon in response to direct electrical field stimulation* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/QMG0-ZBDE>

Dataset Citations

DOI: doi:10.17504/protocols.io.36wgq7yokvk5/v1 [Protocol]
Citation: Heredia, D. (2022). Measuring tension, pellet transit, and calcium imaging within cell subtypes in response to direct electrical field stimulation of colon v1. <https://doi.org/10.17504/protocols.io.36wgq7yokvk5/v1>

Organotopic organization of the porcine vagus nerve

DOI: 10.26275/hmwa-nqdu **Dataset ID:** 287 **Dataset Version:** 1

Citation: Thompson, N., Ravagli, E., & Aristovich, K. (2022). *Organotopic organization of the porcine vagus nerve* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/HMWA-NQDU>

Dataset Citations

DOI: doi:10.17504/protocols.io.b4p2qvqe [Protocol]
Citation: Thompson, N., Mastitskaya, S., Ravagli, E., Aristovich, K., & Holder, D. (2022). Nerve Sample Preparation for MicroCT Scanning v1. <https://doi.org/10.17504/protocols.io.b4p2qvqe>

DOI: doi:10.17504/protocols.io.b4qeqvte [Protocol]
Citation: Thompson, N., Mastitskaya, S., Ravagli, E., Aristovich, K., & Holder, D. (2022). MicroCT Scanning of Pig Vagus Nerves v1. <https://doi.org/10.17504/protocols.io.b4qeqvte>

DOI: doi:10.17504/protocols.io.b42zqyf6 [Protocol]
Citation: Ravagli, E., Mastitskaya, S., Thompson, N., Aristovich, K., & Holder, D. (2022). Vagus Nerve Selective Stimulation and EIT recording v1. <https://doi.org/10.17504/protocols.io.b42zqyf6>

Anatomy and histology of the domestic pig in the context of vagus nerve stimulation

DOI: 10.26275/4iqi-hazf **Dataset ID:** 85 **Dataset Version:** 2

Citation: Ludwig, K. A., Settell, M. L., Pelot, N. A., Knudsen, B. E., Dingle, A., McConico, A. L., Nicolai, E. N., Trevathan, J. K., Ezzell, J. A., Ross, E., Gustafson, K. J., Shoffstall, A. J., Williams, J. C., Zeng, W., Poore, S., Populin, L., Suminski, A., & Grill, W. M. (2022). *Anatomy and histology of the domestic pig in the context of vagus nerve stimulation* (Version 2) [Data set]. SPARC Portal. <https://doi.org/10.26275/4IQI-HAZF>

Dataset Citations

DOI: doi:10.17504/protocols.io.9ieh4be [Protocol]
Citation: Settell, M., E Knudsen, B., L McConico, A., & A Ludwig, K. (2019). Protocol for Pig Vagus Nerve Microdissection and Histology v1. <https://doi.org/10.17504/protocols.io.9ieh4be>

DOI: doi:10.1088/1741-2552/ab7ad4 [Originating Publication]
Citation: Settell, M. L., Pelot, N. A., Knudsen, B. E., Dingle, A. M., McConico, A. L., Nicolai, E. N., Trevathan, J. K., Ezzell, J. A., Ross, E. K., Gustafson, K. J., Shoffstall, A. J., Williams, J. C., Zeng, W., Poore, S. O., Populin, L. C., Suminski, A. J., Grill, W. M., & Ludwig, K. A. (2020). Functional vagotomy in the cervical vagus nerve of the domestic pig: implications for the study of vagus nerve stimulation. *Journal of Neural Engineering*, 17(2), 026022. <https://doi.org/10.1088/1741-2552/ab7ad4>

Enteric neuron responses in mouse distal colon to lumbosacral spinal cord stimulation

DOI: 10.26275/biqn-mqy4 **Dataset ID:** 288 **Dataset Version:** 1

Citation: Najjar, S., Smith-Edwards, K., Davis, B., & Albers, K. (2022). *Enteric neuron responses in mouse distal colon to lumbosacral spinal cord stimulation* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/BIQN-MQY4>

Dataset Citations

DOI: doi:10.17504/protocols.io.ewov1o817lr2/v1 [Protocol]
Citation: Smith-Edwards, K. (2022). Enteric neuron activity in the mouse colon and responses to lumbosacral stimulation v2. <https://doi.org/10.17504/protocols.io.ewov1o817lr2/v1>

Human whole-body with embedded organs

DOI: 10.26275/5mkx-apz9 **Dataset ID:** 156 **Dataset Version:** 3

Citation: Soltani, E., Christie, R., & Hunter, P. (2022). *Human whole-body with embedded organs* (Version 3) [Data set]. SPARC Portal. <https://doi.org/10.26275/5MKX-APZ9>

Dataset Citations

DOI: doi:10.1101/2021.12.30.474265 [Citation]
Citation: BÄ¶rner, K., Bueckle, A., Herr, B. W., Cross, L. E., Quardokus, E. M., Record, E. G., Ju, Y., Silverstein, J. C., Browne, K. M., Jain, S., Wasserfall, C. H., Jorgensen, M. L., Spraggins, J. M., Patterson, N. H., & Weber, G. M. (2021). Tissue Registration and Exploration User Interfaces in support of a Human Reference Atlas. <https://doi.org/10.1101/2021.12.30.474265>

Calcium imaging and tension recording in response to stimulation of the vagus nerve (VNS)

DOI: 10.26275/h4yk-volr **Dataset ID:** 291 **Dataset Version:** 1

Citation: Heredia, D., & Gould, T. (2023). *Calcium imaging and tension recording in response to stimulation of the vagus nerve (VNS)* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/H4YK-VOLR>

Dataset Citations

DOI: doi:10.17504/protocols.io.x54v9y9wzg3e/v1 [Protocol]
Citation: Heredia, D. (2022). Measuring tension and calcium imaging within cell subtypes of the colon in response to vagus nerve stimulation v1. <https://doi.org/10.17504/protocols.io.x54v9y9wzg3e/v1>

Mouse genetic models to manipulate enterochromaffin cell activity

DOI: 10.26275/f4p0-d1ic Dataset ID: 293 Dataset Version: 1

Citation: Rossen, N. D., Julius, D., Brierley, S. M., & Ingraham, H. (2023). *Mouse genetic models to manipulate enterochromaffin cell activity* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/F4P0-D1IC>

Dataset Citations

DOI: doi:10.17504/protocols.io.j8nlkw575l5r/v1 [Protocol]

Citation: D Rossen, N. (2022). Preparation and Immunohistochemistry of Mouse Small Intestine and Colon v1. <https://doi.org/10.17504/protocols.io.j8nlkw575l5r/v1>

Innervation of enteroendocrine cells in the gastric mucosa in human and pig - including a description of the innervation of mucosal vasculature

DOI: 10.26275/x1ht-tsiz Dataset ID: 294 Dataset Version: 1

Citation: Di Natale, M., Oparija, L., Hunne, B., Furness, J., Fakhry, J., Pustovit, R., & Stebbing, M. (2023). *Innervation of enteroendocrine cells in the gastric mucosa in human and pig - including a description of the innervation of mucosal vasculature* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/X1HT-TSIZ>

Dataset Citations

DOI: doi:10.17504/protocols.io.8u7hwzn [Protocol]

Citation: Di Natale, M., Fakhry, J., Stebbing, M., Hunne, B., & B. Furness, J. (2019). Identification of different EEC types and nerve fiber types in human gastric mucosa v1. <https://doi.org/10.17504/protocols.io.8u7hwzn>

DOI: doi:10.1007/s00441-020-03294-7 [Originating Publication]

Citation: Furness, J. B., Di Natale, M., Hunne, B., Oparija-Rogenmozere, L., Ward, S. M., Sasse, K. C., Powley, T. L., Stebbing, M. J., Jaffey, D., & Fothergill, L. J. (2020). The identification of neuronal control pathways supplying effector tissues in the stomach. *Cell and Tissue Research*, 382(3), 433â445. <https://doi.org/10.1007/s00441-020-03294-7>

Spatial distribution and morphometric characterization of mucosal afferents of the pylorus of the rat stomach

DOI: 10.26275/tpu4-kvzo Dataset ID: 295 Dataset Version: 1

Citation: Powley, T. L., Phillips, R., Jaffey, D., McAdams, J. L., Rajwa, B., Black, D., Baronowsky, E. A., Chesney, L., & Evans, C. (2023). *Spatial distribution and morphometric characterization of mucosal afferents of the pylorus of the rat stomach* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/TPU4-KVZO>

Dataset Citations

DOI: doi:10.17504/protocols.io.bp2l6nx5rgqe/v1 [Protocol]

Citation: Powley, T. (2020). High resolution labeling of mucosal vagal afferent fibers using Dextran-Biotin with counterstaining v1. <https://doi.org/10.17504/protocols.io.bp2l6nx5rgqe/v1>

Mapping of the vagal afferent innervation of the mouse lung

DOI: 10.26275/lck3-f9v0 **Dataset ID:** 296 **Dataset Version:** 1

Citation: Kim, S.-H., Patil, M., & Taylor-Clark, T. (2023). *Mapping of the vagal afferent innervation of the mouse lung* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/LCK3-F9V0>

Dataset Citations

DOI: doi:10.17504/protocols.io.3b4l4b6kjvo5/v1 [Protocol]
Citation: Kim, S.-H. (2022). Dissection and immunohistochemistry of mouse lung v1. <https://doi.org/10.17504/protocols.io.3b4l4b6kjvo5/v1>

DOI: doi:10.17504/protocols.io.81wgb6w61lpk/v1 [Protocol]
Citation: Kim, S.-H. (2022). Intraganglionic injection of AAV into nodose ganglia in mice v1. <https://doi.org/10.17504/protocols.io.81wgb6w61lpk/v1>

Sympathetic and parasympathetic effects on action potentials in isolated pig ventricular myocytes

DOI: 10.26275/d3jb-pkzx **Dataset ID:** 297 **Dataset Version:** 1

Citation: Agarwal, S., Fiore, C., & Harvey, R. (2023). *Sympathetic and parasympathetic effects on action potentials in isolated pig ventricular myocytes* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/D3JB-PKZX>

Dataset Citations

DOI: doi:10.17504/protocols.io.ba8iihue [Protocol]
Citation: Isolation of Adult Pig Ventricular Myocytes v1. (2020). <https://doi.org/10.17504/protocols.io.ba8iihue>

DOI: doi:10.17504/protocols.io.ba8qihvw [Protocol]
Citation: Cardiac Action Potential Protocol v1. (2020). <https://doi.org/10.17504/protocols.io.ba8qihvw>

Selective stimulation of the ferret abdominal vagus nerve with multi-contact nerve cuff electrodes

DOI: 10.26275/dfk5-6w3z **Dataset ID:** 301 **Dataset Version:** 1

Citation: Nanivadekar, A., Miller, D., Fulton, S., Sciallo, M., Wong, L., Ogren, J., Chitnis, G., McLaughlin, B., Zhai, S., Fisher, L., Yates, B., Novelli, M., & Horn, C. (2023). *Selective stimulation of the ferret abdominal vagus nerve with multi-contact nerve cuff electrodes* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/DFK5-6W3Z>

Dataset Citations

DOI: doi:10.17504/protocols.io.6a7hahn [Protocol]
Citation: C Horn, C., M. Miller, D., Fulton, S., J. Yates, B., E. Fisher, L., & C. Nanivadekar, A. (2019). SPARC - Acute surgery and experimentation of the gastrointestinal tract and vagus nerve in the ferret v1. <https://doi.org/10.17504/protocols.io.6a7hahn>

DOI: doi:10.17504/protocols.io.6a8hahw [Protocol]
Citation: C Horn, C., M. Miller, D., Fulton, S., J. Yates, B., E. Fisher, L., & C. Nanivadekar, A. (2019). SPARC - Gastrointestinal myoelectric recordings from the behaving ferret v1. <https://doi.org/10.17504/protocols.io.6a8hahw>

DOI: doi:10.17504/protocols.io.6crhav6 [Protocol]
Citation: C Horn, C., M. Miller, D., Fulton, S., J. Yates, B., E. Fisher, L., & C. Nanivadekar, A. (2019). SPARC - Chronic implantation of gastrointestinal and vagus nerve electrodes in the ferret v1. <https://doi.org/10.17504/protocols.io.6crhav6>

DOI: doi:10.1038/s41598-021-91900-1 [Originating Publication]
Citation: Shulgach, J. A., Beam, D. W., Nanivadekar, A. C., Miller, D. M., Fulton, S., Sciallo, M., Ogren, J., Wong, L., McLaughlin, B. L., Yates, B. J., Horn, C. C., & Fisher, L. E. (2021). Selective stimulation of the ferret abdominal vagus nerve with multi-contact nerve cuff electrodes. *Scientific Reports*, 11(1). <https://doi.org/10.1038/s41598-021-91900-1>

Calcium imaging of mouse dorsal root ganglion (DRG) neurons in response to chemical stimuli of distal colon and rectum (colorectum)

DOI: 10.26275/kgkj-6vb9 **Dataset ID:** 302 **Dataset Version:** 1

Citation: Guo, T., Deierlein, N., & Feng, B. (2023). *Calcium imaging of mouse dorsal root ganglion (DRG) neurons in response to chemical stimuli of distal colon and rectum (colorectum)* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/KGKJ-6VB9>

Dataset Citations

DOI: doi:10.17504/protocols.io.ewov1n2mogr2/v1 [Protocol]
Citation: Feng, B. (2022). Chemical colorectal stimuli for GCaMP6f characterization v1. <https://doi.org/10.17504/protocols.io.ewov1n2mogr2/v1>

Myenteric neuron activity during spontaneous motor complexes in mouse colon

DOI: 10.26275/ggj4-agvt **Dataset ID:** 303 **Dataset Version:** 1

Citation: Smith-Edwards, K., Howard, M., & Davis, B. (2023). *Myenteric neuron activity during spontaneous motor complexes in mouse colon* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/GGJ4-AGVT>

Dataset Citations

DOI: doi:10.17504/protocols.io.6qpvr4oz3gmk/v2 [Protocol]
Citation: Smith-Edwards, K. (2023). Enteric neuron activity during spontaneous motor complexes in mouse colon v2. <https://doi.org/10.17504/protocols.io.6qpvr4oz3gmk/v2>

DOI: doi:10.1111/nmo.14678 [Citation]
Citation: Barth, B. B., Redington, E. R., Gautam, N., Pelot, N. A., & Grill, W. M. (2023). Calcium image analysis in the moving gut. *Neurogastroenterology & Motility*, 35(12). Portico. <https://doi.org/10.1111/nmo.14678>

Regional analysis of autonomic nerves in normal

and diseased human hearts

DOI: 10.26275/z1wa-spub **Dataset ID:** 304 **Dataset Version:** 1

Citation: Brennan, J., Hanna, P., Efimov, I., Shivkumar, K., Ajijola, O. A., Tompkins, J. D., Ardell, J., & Hoover, D. (2023). *Regional analysis of autonomic nerves in normal and diseased human hearts* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/Z1WA-SPUB>

Dataset Citations

DOI: doi:10.17504/protocols.io.eq2lypox9/v1 [Protocol]
Citation: Hoover, D. (2021). Protocol for ABC Immunohistochemistry and Quantifying Nerves v1. <https://doi.org/10.17504/protocols.io.eq2lypox9/v1>

Acute Wired Colonic Monitor of Conscious Activity (ColoMOCA) implantation in pig bowel

DOI: 10.26275/6f3g-wvzh **Dataset ID:** 114 **Dataset Version:** 3

Citation: Damaser, M., Bourbeau, D., Majerus, S., McAdams, I., Yang, J., Rietsch, A., Hanzlicek, B., & Smiley, A. (2023). *Acute Wired Colonic Monitor of Conscious Activity (ColoMOCA) implantation in pig bowel* (Version 3) [Data set]. SPARC Portal. <https://doi.org/10.26275/6F3G-WVZH>

Dataset Citations

DOI: doi:10.17504/protocols.io.bfxbjpin [Protocol]
Citation: SPARC Pig1 acute wired ColoMOCA implantation v1. (2020). <https://doi.org/10.17504/protocols.io.bfxbjpin>

DOI: doi:10.17504/protocols.io.bfxgjjpw [Protocol]
Citation: SPARC Pig2 acute wired ColoMOCA implantation v1. (2020). <https://doi.org/10.17504/protocols.io.bfxgjjpw>

Acute wired Urological Monitor of Conscious Activity (UroMOCA) implantation in feline bladder

DOI: 10.26275/srm7-no3j **Dataset ID:** 132 **Dataset Version:** 3

Citation: Damaser, M., Bourbeau, D., Majerus, S., McAdams, I., Yang, J., Deng, K., & Rietsch, A. (2023). *Acute wired Urological Monitor of Conscious Activity (UroMOCA) implantation in feline bladder* (Version 3) [Data set]. SPARC Portal. <https://doi.org/10.26275/SRM7-NO3J>

Dataset Citations

DOI: doi:10.17504/protocols.io.bf2kjqcw [Protocol]
Citation: SPARC Cat acute UroMOCA implantation v1. (2020). <https://doi.org/10.17504/protocols.io.bf2kjqcw>

DOI: doi:10.17504/protocols.io.bf2pjqdn [Protocol]
Citation: SPARC Cat acute UroMOCA implantation surgery v1. (2020). <https://doi.org/10.17504/protocols.io.bf2pjqdn>

Cardioneural recordings using floating multi-channel plunge micro-electrodes in pigs

DOI: 10.26275/nomg-p2vk **Dataset ID:** 26 **Dataset Version:** 5

Citation: Vaseghi, M., Ardell, J. L., & Shivkumar, K. (2023). *Cardioneural recordings using floating multi-channel plunge micro-electrodes in pigs* (Version 5) [Data set]. SPARC Portal. <https://doi.org/10.26275/NOMG-P2VK>

Dataset Citations

DOI: doi:10.17504/protocols.io.2i4gcgw [Protocol]
Citation: Ardell, J. (2019). Pig-Neural recording and analysis-workflow v1. <https://doi.org/10.17504/protocols.io.2i4gcgw>

DOI: doi:10.17504/protocols.io.2ncgdaw [Protocol]
Citation: Vaseghi, M., & Ardell, J. (2019). Pig Nodose Ganglion protocol v1. <https://doi.org/10.17504/protocols.io.2ncgdaw>

Chemogenetic activation or inhibition of cholinergic or nitrergic myenteric neurons of mouse colon

DOI: 10.26275/kj2u-2ukf **Dataset ID:** 148 **Dataset Version:** 3

Citation: Heredia, D., & Gould, T. (2023). *Chemogenetic activation or inhibition of cholinergic or nitrergic myenteric neurons of mouse colon* (Version 3) [Data set]. SPARC Portal. <https://doi.org/10.26275/KJ2U-2UKF>

Dataset Citations

DOI: doi:10.17504/protocols.io.btuznnx6 [Protocol]
Citation: Contractile response to chemogenetic activation or inhibition of cholinergic or nitrergic myenteric neurons of the mouse colon v1. (2021). <https://doi.org/10.17504/protocols.io.btuznnx6>

Population of mock morphological models of vagus nerve stimulation with cuff electrodes for the purpose of studying the effect of fascicle diameter on activation threshold

DOI: 10.26275/lk0e-kgrs **Dataset ID:** 312 **Dataset Version:** 1

Citation: Davis, C., Musselman, E. D., Grill, W. M., & Pelot, N. A. (2023). *Population of mock morphological models of vagus nerve stimulation with cuff electrodes for the purpose of studying the effect of fascicle diameter on activation threshold* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/LK0E-KGRS>

Dataset Citations

DOI: doi:10.26275/kqg4-wbtp [Citation]
Citation: Musselman, E. D., Davis, C., Grill, W. M., & Pelot, N. A. (2023). *Histology-based computational models of implanted human cervical vagus nerve stimulation with the LivaNova helical cuff electrode* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/KQG4-WBTP>

Topographical mapping of sympathetic postganglionic innervation of the mouse heart

DOI: 10.26275/wh9h-tbew **Dataset ID:** 314 **Dataset Version:** 1

Citation: Bizanti, A. (G., Zhang, Y., Osanlouy, M., Heal, M., Chen, J., & Cheng, Z. (2023). *Topographical mapping of sympathetic postganglionic innervation of the mouse heart* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/WH9H-TBEW>

Dataset Citations

DOI: doi:10.17504/protocols.io.bygmptu6 [Protocol]
Citation: Mapping CGRP-IR innervation of male mice stomach with NeuroLucida 360 v1. (2021). <https://doi.org/10.17504/protocols.io.bygmptu6>

DOI: doi:10.17504/protocols.io.n92ldzbxv5b/v2 [Protocol]
Citation: Topographical mapping of sympathetic postganglionic innervation of mouse heart v2. (2023). <https://doi.org/10.17504/protocols.io.n92ldzbxv5b/v2>

Visceromotor responses (VMR) to colorectal distension in mice with silenced or activated enterochromaffin cells

DOI: 10.26275/zsop-bygv **Dataset ID:** 315 **Dataset Version:** 1

Citation: Bayrer, J., Braverman, K. N., Ingraham, H., Brierley, S. M., & Julius, D. (2023). *Visceromotor responses (VMR) to colorectal distension in mice with silenced or activated enterochromaffin cells* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/ZSOP-BYGV>

Dataset Citations

DOI: doi:10.17504/protocols.io.n92ldp347l5b/v1 [Protocol]
Citation: Bayrer, J. (2022). Measuring the Visceromotor Response in Rodents v1. <https://doi.org/10.17504/protocols.io.n92ldp347l5b/v1>

Decoding vagus nerve activity with carbon nanotube sensors in freely moving rodents

DOI: 10.26275/do5j-mz5q **Dataset ID:** 316 **Dataset Version:** 1

Citation: Marmarstein, J., McCallum, G., Rodrigues, A., & Durand, D. (2023). *Decoding vagus nerve activity with carbon nanotube sensors in freely moving rodents* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/DO5J-MZ5Q>

Dataset Citations

DOI: doi:10.17504/protocols.io.4r3l273x3g1y/v1 [Protocol]
Citation: McCallum, G. (2023). Chronic Vagus-Nerve Activity with Carbon Nanotube Sensors in Freely Moving Rodents v1. <https://doi.org/10.17504/protocols.io.4r3l273x3g1y/v1>

Histology of pig cervical vagus nerve

DOI: 10.26275/f5se-ynpk **Dataset ID:** 317 **Dataset Version:** 1

Citation: Settell, M. L., Ludwig, K. A., Knudsen, B. E., Pelot, N. A., & Nicolai, E. N. (2023). *Histology of pig cervical vagus nerve* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/F5SE-YNPK>

Dataset Citations

DOI: doi:10.17504/protocols.io.9ieh4be [Protocol]

Citation: Settell, M., E Knudsen, B., L McConico, A., & A Ludwig, K. (2019). Protocol for Pig Vagus Nerve Microdissection and Histology v1. <https://doi.org/10.17504/protocols.io.9ieh4be>

DOI: doi:10.1088/1741-2552/acda64 [Citation]

Citation: Musselman, E. D., Pelot, N. A., & Grill, W. M. (2023). Validated computational models predict vagus nerve stimulation thresholds in preclinical animals and humans. *Journal of Neural Engineering*, 20(3), 036032. <https://doi.org/10.1088/1741-2552/acda64>

Human cervical vagus nerve fascicle imaging with MicroCT

DOI: 10.26275/59t4-jlnz **Dataset ID:** 321 **Dataset Version:** 1

Citation: Upadhye, A., & Shoffstall, A. J. (2023). *Human cervical vagus nerve fascicle imaging with MicroCT* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/59T4-JLNZ>

Dataset Citations

DOI: doi:10.17504/protocols.io.bp2l61715vqe/v2 [Protocol]

Citation: R. Upadhye, A. (2022). Staining the Human Vagus Nerve with Osmium Tetroxide and Micro CT imaging v2. <https://doi.org/10.17504/protocols.io.bp2l61715vqe/v2>

Distribution and coexpression patterns of specific cell markers of enteroendocrine cells in pig gastric epithelium

DOI: 10.26275/fi87-3n6o **Dataset ID:** 22 **Dataset Version:** 2

Citation: Fothergill, L. J., Furness, J., Stebbing, M., Galiazzo, G., Hunne, B., Fahkry, J., Weissenborn, F., & Fazio Coles, T. E. (2023). *Distribution and coexpression patterns of specific cell markers of enteroendocrine cells in pig gastric epithelium* (Version 2) [Data set]. SPARC Portal. <https://doi.org/10.26275/FI87-3N6O>

Dataset Citations

DOI: doi:10.17504/protocols.io.4vngw5e [Protocol]

Citation: J. Fothergill, L., Stebbing, M., Hunne, B., Galiazzo, G., Fahkry, J., Weissenborn, F., Fazio Coles, T., & B. Furness, J. (2019). Immunohistochemistry and high resolution microscopy of pig gastric enteroendocrine cells v1. <https://doi.org/10.17504/protocols.io.4vngw5e>

RNA sequencing reveals novel transcripts from sympathetic stellate ganglia during cardiac sympathetic hyperactivity in rats

DOI: 10.26275/6b53-usyr **Dataset ID:** 139 **Dataset Version:** 3

Citation: Davis, H., Bardsley, E., & Paterson, D. (2023). *RNA sequencing reveals novel transcripts from sympathetic stellate ganglia during cardiac sympathetic hyperactivity in rats* (Version 3) [Data set]. SPARC Portal. <https://doi.org/10.26275/6B53-USYR>

Dataset Citations

DOI: doi:10.1038/s41598-018-26651-7 [Originating Publication]

Citation: Bardsley, E. N., Davis, H., Ajjola, O. A., Buckler, K. J., Ardell, J. L., Shivkumar, K., & Paterson, D. J. (2018). RNA Sequencing Reveals Novel Transcripts from Sympathetic Stellate Ganglia During Cardiac Sympathetic Hyperactivity. *Scientific Reports*, 8(1). <https://doi.org/10.1038/s41598-018-26651-7>

Triaxial mechanical testing of dog colon segments

DOI: 10.26275/d41u-sokg **Dataset ID:** 142 **Dataset Version:** 3

Citation: Patel, B., Wang, Y., Kassab, G., & Gregersen, H. (2023). *Triaxial mechanical testing of dog colon segments* (Version 3) [Data set]. SPARC Portal. <https://doi.org/10.26275/D41U-SOKG>

Dataset Citations

DOI: doi:10.17504/protocols.io.bp7qrmrw [Protocol]

Citation: Patel, B. (2020). Triaxial mechanical testing of dog colon samples v1. <https://doi.org/10.17504/protocols.io.bp7qrmrw>

Influence of direct colon tissue electrical stimulation on colonic motility in anesthetized male Yucatan minipig

DOI: 10.26275/6lqa-ghyr **Dataset ID:** 34 **Dataset Version:** 6

Citation: Larauche, M., Wang, Y., Wang, P.-M., Dubrovsky, G., Lo, Y.-K., Hsiang, I., Dunn, J., Liu, W., Tache, Y., & Mulugeta, M. (2023). *Influence of direct colon tissue electrical stimulation on colonic motility in anesthetized male Yucatan minipig* (Version 6) [Data set]. SPARC Portal. <https://doi.org/10.26275/6LQA-GHYR>

Dataset Citations

DOI: doi:10.17504/protocols.io.3rmgm46 [Protocol]

Citation: Larauche, M. (2019). Tache_Mulugeta_OT2OD024899_Colon tissue electrical stimulation and colonic motility measurements v1. <https://doi.org/10.17504/protocols.io.3rmgm46>

DOI: doi:10.1038/s41598-022-17549-6 [Citation]

Citation: Wang, Y., Wang, P.-M., Larauche, M., Mulugeta, M., & Liu, W. (2022). Bio-impedance method to monitor colon motility response to direct distal colon stimulation in anesthetized pigs. *Scientific Reports*, 12(1). <https://doi.org/10.1038/s41598-022-17549-6>

DOI: doi:10.1111/nmo.13925 [Originating Publication]

Citation: Larauche, M., Wang, Y., Wang, P., Dubrovsky, G., Lo, Y., Hsiang, E., Dunn, J. C. Y., TachÃ©, Y., Liu, W., & Million, M. (2020). The effect of colonic tissue electrical stimulation and celiac branch of the abdominal vagus nerve neuromodulation on colonic motility in anesthetized pigs. *Neurogastroenterology & Motility*, 32(11). Portico. <https://doi.org/10.1111/nmo.13925>

DOI: doi:https://doi.org/10.26275/up27-ibcr [Citation]

Citation: Larauche, M., Wang, Y., Wang, P.-M., Dubrovsky, G., Lo, Y.-K., Hsiang, I., Dunn, J., Liu, W., Tache, Y., & Mulugeta, M. (2022). <i>Influence of direct colon tissue electrical stimulation on colonic motility in anesthetized male Yucatan minipig</i> (Version 5) [Data set]. SPARC Portal. <https://doi.org/10.26275/UP27-IBCR>

Influence of acute thoracolumbar root nerves electrical stimulation on colonic motility in

anesthetized male Yucatan minipigs

DOI: 10.26275/abac-rzbv Dataset ID: 149 Dataset Version: 3

Citation: Larauche, M., Wang, Y., Chen, Y.-P., Liu, W., & Mulugeta, M. (2023). *Influence of acute thoracolumbar root nerves electrical stimulation on colonic motility in anesthetized male Yucatan minipigs* (Version 3) [Data set]. SPARC Portal. <https://doi.org/10.26275/ABAC-RZBV>

Dataset Citations

DOI: doi:10.17504/protocols.io.3rmgm46 [Protocol]
Citation: Larauche, M. (2019). Tache_Mulugeta_OT2OD024899_Colon tissue electrical stimulation and colonic motility measurements v1. <https://doi.org/10.17504/protocols.io.3rmgm46>

DOI: doi:10.1111/nmo.13925 [Originating Publication]
Citation: Larauche, M., Wang, Y., Wang, P., Dubrovsky, G., Lo, Y., Hsiang, E., Dunn, J. C. Y., TachÃ©, Y., Liu, W., & Million, M. (2020). The effect of colonic tissue electrical stimulation and celiac branch of the abdominal vagus nerve neuromodulation on colonic motility in anesthetized pigs. *Neurogastroenterology & Motility*, 32(11). Portico. <https://doi.org/10.1111/nmo.13925>

Influence of acute celiac branch of abdominal vagus nerve stimulation on colonic motility in anesthetized male Yucatan minipigs

DOI: 10.26275/n3uf-5doz Dataset ID: 150 Dataset Version: 4

Citation: Larauche, M., Wang, Y., Wang, P.-M., Dubrovsky, G., Lo, Y.-K., Hsiang, I., Dunn, J., Liu, W., Tache, Y., & Mulugeta, M. (2023). *Influence of acute celiac branch of abdominal vagus nerve stimulation on colonic motility in anesthetized male Yucatan minipigs* (Version 4) [Data set]. SPARC Portal. <https://doi.org/10.26275/N3UF-5DOZ>

Dataset Citations

DOI: doi:10.17504/protocols.io.3rmgm46 [Protocol]
Citation: Larauche, M. (2019). Tache_Mulugeta_OT2OD024899_Colon tissue electrical stimulation and colonic motility measurements v1. <https://doi.org/10.17504/protocols.io.3rmgm46>

DOI: doi:10.1111/nmo.13925 [Originating Publication]
Citation: Larauche, M., Wang, Y., Wang, P., Dubrovsky, G., Lo, Y., Hsiang, E., Dunn, J. C. Y., TachÃ©, Y., Liu, W., & Million, M. (2020). The effect of colonic tissue electrical stimulation and celiac branch of the abdominal vagus nerve neuromodulation on colonic motility in anesthetized pigs. *Neurogastroenterology & Motility*, 32(11). Portico. <https://doi.org/10.1111/nmo.13925>

Scaffold map - Quantitative analysis of enteric neurons containing choline acetyltransferase and nitric oxide synthase immunoreactivities in the submucosal and myenteric plexuses of the porcine colon

DOI: 10.26275/qjpu-t0sy Dataset ID: 328 Dataset Version: 1

Citation: Lin, M., Sorby, H., & Hunter, P. (2023). *Scaffold map - Quantitative analysis of enteric neurons containing choline acetyltransferase and nitric oxide synthase immunoreactivities in the submucosal and myenteric plexuses of the porcine colon* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/QJPU-TOSY>

Dataset Citations

DOI: doi:10.17504/protocols.io.n2bvj6o35lk5/v3 [Protocol]
Citation: Scaffold Mapping Protocol - Version 1.1.1 v3. (2022).
<https://doi.org/10.17504/protocols.io.n2bvj6o35lk5/v3>

High resolution manometry

DOI: 10.26275/ryft-516s **Dataset ID:** 33 **Dataset Version:** 3

Citation: Mohd Rosli, R., Kumar, R., Hibberd, T., Costa, M., Lukasz Wiklendt, Wattchow, D., Arkwright, J., de Fontgalland, D., Brookes, S., & Dinning, P. (2023). *High resolution manometry* (Version 3) [Data set]. SPARC Portal. <https://doi.org/10.26275/RYFT-516S>

Dataset Citations

DOI: doi:10.17504/protocols.io.36wgq9zeolk5/v1 [Protocol]
Citation: not provided, Phil. dinning. (2019). Protocol for High Resolution Manometry v1.
<https://doi.org/10.17504/protocols.io.36wgq9zeolk5/v1>

Effect of chronic gastric electrical stimulation on the feeding behavior of diet-induced obese male Sprague-Dawley rats consuming a 45% high-fat diet

DOI: 10.26275/3q5o-leo5 **Dataset ID:** 329 **Dataset Version:** 1

Citation: Phillips, R., Powley, T. L., Rajwa, B., & Jaffey, D. (2023). *Effect of chronic gastric electrical stimulation on the feeding behavior of diet-induced obese male Sprague-Dawley rats consuming a 45% high-fat diet* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/3Q5O-LEO5>

Dataset Citations

DOI: doi:10.17504/protocols.io.b2qgqdtw [Protocol]
Citation: Protocol for chronic implantation of patch electrodes on the gastric muscle wall of the rat v1. (2021). <https://doi.org/10.17504/protocols.io.b2qgqdtw>

Ussing chamber experiments for distension evoked secretion in human colon

DOI: 10.26275/pa9i-likc **Dataset ID:** 330 **Dataset Version:** 1

Citation: Schemann, M., Schäuuffele, S., Michel, K., & Mazzuoli-Weber, G. (2023). *Ussing chamber experiments for distension evoked secretion in human colon* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/PA9I-LIKC>

Dataset Citations

DOI: doi:10.17504/protocols.io.8epv5joqdl1b/v1 [Protocol]
Citation: Ussing chamber experiments for distension evoked secretion in mucosa/submucosa preparations from human colon v1. (2023). <https://doi.org/10.17504/protocols.io.8epv5joqdl1b/v1>

CLARITY and 3D imaging with high resolution

and deep scanning of innervation in the pig colon by using SP8 DIVE fully tunable spectral multiphoton microscope

DOI: 10.26275/rhda-nblc **Dataset ID:** 331 **Dataset Version:** 1

Citation: Yuan , P.-Q., & Tache, Y. (2023). *CLARITY and 3D imaging with high resolution and deep scanning of innervation in the pig colon by using SP8 DIVE fully tunable spectral multiphoton microscope* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/RHDA-NBLC>

Dataset Citations

DOI: doi:10.17504/protocols.io.4r9gv96 [Protocol]
Citation: pq Yuan, P.-Q., & Tache, Y. (2019).
Tache_Yuan_OT2OD024899_CLARITYAnd3DImagingOfColonicENSintheMouseAndPig_1_2019-Pig_Protocol v1. <https://doi.org/10.17504/protocols.io.4r9gv96>

Targets of sympathetic nerves in myenteric plexus of human colon

DOI: 10.26275/aqri-vyb4 **Dataset ID:** 332 **Dataset Version:** 1

Citation: Parker, D. R., Wiklendt, L., Humenick, A., Chen, N., Tiong, S. C., Wattchow, D. A., Dinning, P., & Brookes, S. (2023). *Targets of sympathetic nerves in myenteric plexus of human colon* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/AQRI-VYB4>

Dataset Citations

DOI: doi:10.17504/protocols.io.dm6gp3bx8vzp/v1 [Protocol]
Citation: R Parker, D. (2023). Targets of sympathetic nerves in myenteric plexus of human colon v1. <https://doi.org/10.17504/protocols.io.dm6gp3bx8vzp/v1>

DOI: doi:10.1242/jcs.261950 [Citation]
Citation: Sorensen, L., Humenick, A., Poon, S. S. B., Han, M. N., Mahdavian, N. S., Rowe, M. C., Hamnett, R., Gómez-de-Mariscal, E., Neckel, P. H., Saito, A., Mutunduwe, K., Glennan, C., Haase, R., McQuade, R. M., Foong, J. P. P., Brookes, S. J. H., Kaltschmidt, J. A., Muñoz-Barrutia, A., King, S. K., & Rajasekhar, P. (2024). Gut Analysis Toolbox â automating quantitative analysis of enteric neurons. *Journal of Cell Science*, 137(20). <https://doi.org/10.1242/jcs.261950>

Antibodies tested in the colon – Human

DOI: 10.26275/puzi-xtm3 **Dataset ID:** 290 **Dataset Version:** 2

Citation: Brookes, S., Schemann, M., Yuan , P.-Q., Sternini, C., Mazzuoli-Weber, G., Humenick, A., Chen, N., Bains, M., & Tache, Y. (2023). *Antibodies tested in the colon – Human* (Version 2) [Data set]. SPARC Portal. <https://doi.org/10.26275/PUZI-XTM3>

Dataset Citations

DOI: doi:10.17504/protocols.io.4r9gv96 [Protocol]
Citation: pq Yuan, P.-Q., & TachÃ©, Y. (2019).
Tache_Yuan_OT2OD024899_CLARITYAnd3DImagingOfColonicENSintheMouseAndPig_1_2019-
Pig_Protocol v1. <https://doi.org/10.17504/protocols.io.4r9gv96>

DOI: doi:10.17504/protocols.io.bfqmjmu6 [Protocol]
Citation: Quantitative analysis of enteric neurons containing choline acetyltransferase and nitric
oxide synthase immunoreactivities in the submucosal and myenteric plexuses of the porcine
colon v1. (2020). <https://doi.org/10.17504/protocols.io.bfqmjmu6>

DOI: doi:10.17504/protocols.io.b4qrqv6 [Protocol]
Citation: Immunohistochemistry of porcine enteric neurons v1. (2022).
<https://doi.org/10.17504/protocols.io.b4qrqv6>

Scaffold map - Quantification of rat gastric enteroendocrine cells

DOI: 10.26275/litx-swak Dataset ID: 286 Dataset Version: 3

Citation: Lin, M., Sorby, H., & Hunter, P. (2023). *Scaffold map - Quantification of rat gastric enteroendocrine cells* (Version 3) [Data set]. SPARC Portal.
<https://doi.org/10.26275/LITX-SWAK>

Dataset Citations

DOI: doi:10.17504/protocols.io.n2bvj6o35lk5/v3 [Protocol]
Citation: Scaffold Mapping Protocol - Version 1.1.1 v3. (2022).
<https://doi.org/10.17504/protocols.io.n2bvj6o35lk5/v3>

Stimulation of the pig vagus nerve to modulate target effect versus side effect

DOI: 10.26275/efbj-8evl Dataset ID: 333 Dataset Version: 1

Citation: Blanz, S., Settell, M. L., & Ludwig, K. A. (2023). *Stimulation of the pig vagus nerve to modulate target effect versus side effect* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/EFBJ-8EVL>

Dataset Citations

DOI: doi:10.17504/protocols.io.yxmvm2wzbg3p/v2 [Protocol]
Citation: L Blanz, S. (2023). Spatially selective stimulation of the pig vagus nerve to modulate target effect versus side effect v2. <https://doi.org/10.17504/protocols.io.yxmvm2wzbg3p/v2>

Optogenetic activation of nitrergic and cholinergic neurons of murine colonic myenteric plexus

DOI: 10.26275/xnv0-gtsj Dataset ID: 126 Dataset Version: 3

Citation: Heredia, D., & Gould, T. (2023). *Optogenetic activation of nitrergic and cholinergic neurons of murine colonic myenteric plexus* (Version 3) [Data set]. SPARC Portal. <https://doi.org/10.26275/XNV0-GTSJ>

Dataset Citations

DOI: doi:10.17504/protocols.io.82fhybn [Protocol]
Citation: Imaging and stimulating enteric neurons in the murine large intestine v1. (2019).
<https://doi.org/10.17504/protocols.io.82fhybn>

Calcium imaging tension recording and pellet transit in mouse colon in response to stimulation of the pelvic nerve (PNS)

DOI: 10.26275/swkm-bzmg Dataset ID: 336 Dataset Version: 1

Citation: Heredia, D., & Gould, T. (2023). *Calcium imaging tension recording and pellet transit in mouse colon in response to stimulation of the pelvic nerve (PNS)* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/SWKM-BZMG>

Dataset Citations

DOI: doi:10.17504/protocols.io.ewov1nmxpgr2/v1 [Protocol]
Citation: Gould, T. (2022). Measuring tension, pellet transit, and calcium imaging within cell subtypes in response to pelvic nerve stimulation v1.
<https://doi.org/10.17504/protocols.io.ewov1nmxpgr2/v1>

MicroCT imaging of the fascicular structure in the porcine right and left cervical vagus nerve

DOI: 10.26275/gfwu-pi0p Dataset ID: 337 Dataset Version: 1

Citation: Kronsteiner, B., Heimel, P., Slezak, P., Weninger, W. J., Podesser, B., Kiss, A., Oberoi, G., Zopf, L., Habermusch, M., & Moscato, F. (2023). *MicroCT imaging of the fascicular structure in the porcine right and left cervical vagus nerve* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/GFWU-PI0P>

Dataset Citations

DOI: doi:10.17504/protocols.io.ewov1qd2ygr2/v1 [Protocol]
Citation: Kronsteiner, B., Habermusch, M., & Moscato, F. (2023). MicroCT Imaging of the Fascicular Structure in the Porcine Right and Left Cervical Vagus Nerve v1.
<https://doi.org/10.17504/protocols.io.ewov1qd2ygr2/v1>

Mid-lumbar (L3) epidural stimulation effects on bladder and external urethral sphincter in non-injured and chronically transected urethane-anesthetized rats

DOI: 10.26275/8zuc-gst1 Dataset ID: 338 Dataset Version: 1

Citation: Medina Aguinaga, D., Hoey, R., Wilkins, N., Ugiliweneza, B., Fell, J., Hubscher, C., & Harkema, S. (2023). *Mid-lumbar (L3) epidural stimulation effects on bladder and external urethral sphincter in non-injured and chronically transected urethane-anesthetized rats* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/8ZUC-GST1>

Dataset Citations

DOI: doi:10.17504/protocols.io.bp2l6xdk5lqe/v2 [Protocol]
Citation: Medina Aguinaga, D., Hoey, R., L. Wilkins, N., Ugiliweneza, B., Fell, J., J. Harkema, S., & H. Hubscher, C. (2023). Mid-lumbar (L3) epidural stimulation effects on bladder and external urethral sphincter in non-injured and chronically transected urethane-anesthetized rats v2.
<https://doi.org/10.17504/protocols.io.bp2l6xdk5lqe/v2>

Scaffold map - Mapping of human gastric enteroendocrine cells

DOI: 10.26275/3vqo-xux0 Dataset ID: 292 Dataset Version: 3

Citation: Lin, M., Sorby, H., & Hunter, P. (2023). *Scaffold map - Mapping of human gastric enteroendocrine cells* (Version 3) [Data set]. SPARC Portal.
<https://doi.org/10.26275/3VQO-XUX0>

Dataset Citations

DOI: doi:10.17504/protocols.io.n2bvj6o35lk5/v3 [Protocol]
Citation: Scaffold Mapping Protocol - Version 1.1.1 v3. (2022).
<https://doi.org/10.17504/protocols.io.n2bvj6o35lk5/v3>

Identification of lung innervating sensory neurons and their target specificity in mouse (2)

DOI: 10.26275/d488-z2q8 Dataset ID: 345 Dataset Version: 1

Citation: Verheyden, J., & Sun, X. (2023). *Identification of lung innervating sensory neurons and their target specificity in mouse (2)* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/D488-Z2Q8>

Dataset Citations

DOI: doi:10.17504/protocols.io.bw3gpgjw [Protocol]
Citation: Verheyden, J. (2021). Cubic Clearing and Whole Mount Imaging of Mouse Lung Lobes v1. <https://doi.org/10.17504/protocols.io.bw3gpgjw>

DOI: doi:10.1152/ajplung.00376.2021 [Originating Publication]
Citation: Su, Y., Barr, J., Jaquish, A., Xu, J., Verheyden, J. M., & Sun, X. (2022). Identification of lung innervating sensory neurons and their target specificity. *American Journal of Physiology-Lung Cellular and Molecular Physiology*, 322(1), L50âL63.
<https://doi.org/10.1152/ajplung.00376.2021>

Anterograde tracing of spinal afferent innervation in flat-mounts of the rat stomach

DOI: 10.26275/rmcz-jfoq Dataset ID: 347 Dataset Version: 1

Citation: Ma, J., Nguyen, D., Madas, J., Kwiat, A. M., Toledo, Z., Bizanti, A. (G.), Kogut, N., Mistareehi, A., Bendowski, K., Zhang, Y., Chen, J., Li, D.-P., Powley, T. L., Furness, J., & Cheng, Z. (2023). *Anterograde tracing of spinal afferent innervation in flat-mounts of the rat stomach* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/RMCZ-JFOQ>

Dataset Citations

DOI: doi:10.17504/protocols.io.rm7vzb9dxvx1/v1 [Protocol]
Citation: Anterograde tracing of spinal afferent innervation in rat stomach flat-mounts v1. (2023).
<https://doi.org/10.17504/protocols.io.rm7vzb9dxvx1/v1>

Characterization of projections of long interneurons in human colon

DOI: 10.26275/iv1j-x1g4 **Dataset ID:** 348 **Dataset Version:** 1

Citation: Brookes, S. (2023). *Characterization of projections of long interneurons in human colon* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/IV1J-X1G4>

Dataset Citations

DOI: doi:10.17504/protocols.io.btwinpce [Protocol]
Citation: Protocol for "Characterization of projections of long interneurons in human colon"; - Brookes Lab v1. (2021). <https://doi.org/10.17504/protocols.io.btwinpce>

Fecobionics study in healthy human subjects

DOI: 10.26275/ekv2-ohrk **Dataset ID:** 350 **Dataset Version:** 1

Citation: Wang, Y., Patel, B., Kassab, G., & Gregersen, H. (2023). *Fecobionics study in healthy human subjects* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/EKV2-OHRK>

Dataset Citations

DOI: doi:10.17504/protocols.io.5qpvor1ybv4o/v1 [Protocol]
Citation: Wang, Y. (2023). Fecobionics Test in Normal Subjects v1. <https://doi.org/10.17504/protocols.io.5qpvor1ybv4o/v1>

Pilot Fecobionics study in healthy human subjects

DOI: 10.26275/j48r-vn5s **Dataset ID:** 351 **Dataset Version:** 1

Citation: Wang, Y., Patel, B., Kassab, G., & Gregersen, H. (2023). *Pilot Fecobionics study in healthy human subjects* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/J48R-VN5S>

Dataset Citations

DOI: doi:10.17504/protocols.io.5qpvor1ybv4o/v1 [Protocol]
Citation: Wang, Y. (2023). Fecobionics Test in Normal Subjects v1. <https://doi.org/10.17504/protocols.io.5qpvor1ybv4o/v1>

Mouse genetic models to manipulate enterochromaffin cell activity - Murine Organoid ELISA

DOI: 10.26275/uco6-ktjq **Dataset ID:** 352 **Dataset Version:** 1

Citation: Tohara, K., & Julius, D. (2023). *Mouse genetic models to manipulate enterochromaffin cell activity - Murine Organoid ELISA* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/UCO6-KTJQ>

Dataset Citations

DOI: doi:10.17504/protocols.io.8epv5jz54l1b/v1 [Protocol]
Citation: Tohara, K. (2022). Mouse genetic models to manipulate enterochromaffin cell activity - Murine Organoid ELISA v1. <https://doi.org/10.17504/protocols.io.8epv5jz54l1b/v1>

Validated computational models predict vagus nerve stimulation thresholds in preclinical animals and humans

DOI: 10.26275/wglu-jiud **Dataset ID:** 324 **Dataset Version:** 3

Citation: Musselman, E. D., Grill, W. M., & Pelot, N. A. (2023). *Validated computational models predict vagus nerve stimulation thresholds in preclinical animals and humans* (Version 3) [Data set]. SPARC Portal. <https://doi.org/10.26275/WGLU-JIUD>

Dataset Citations

DOI: doi:10.1088/1741-2552/acda64 [Citation]
Citation: Musselman, E. D., Pelot, N. A., & Grill, W. M. (2023). Validated computational models predict vagus nerve stimulation thresholds in preclinical animals and humans. *Journal of Neural Engineering*, 20(3), 036032. <https://doi.org/10.1088/1741-2552/acda64>

DOI: doi:10.1038/s41467-024-51709-8 [Citation]
Citation: Hussain, M. A., Grill, W. M., & Pelot, N. A. (2024). Highly efficient modeling and optimization of neural fiber responses to electrical stimulation. *Nature Communications*, 15(1). <https://doi.org/10.1038/s41467-024-51709-8>

Pig-specific computational models of monopolar vagus nerve stimulation with a six-contact cuff electrode

DOI: 10.26275/df7j-e48n **Dataset ID:** 305 **Dataset Version:** 3

Citation: Musselman, E. D., Blanz, S., Settell, M. L., Ludwig, K. A., Grill, W. M., & Pelot, N. A. (2023). *Pig-specific computational models of monopolar vagus nerve stimulation with a six-contact cuff electrode* (Version 3) [Data set]. SPARC Portal. <https://doi.org/10.26275/DF7J-E48N>

Dataset Citations

DOI: doi:10.17504/protocols.io.yxmvm2wzbg3p/v1 [Protocol]
Citation: L. Blanz, S. (2023). Spatially selective stimulation of the pig vagus nerve to modulate target effect versus side effect v1. <https://doi.org/10.17504/protocols.io.yxmvm2wzbg3p/v1>

DOI: doi:10.1038/s41467-024-51709-8 [Citation]
Citation: Hussain, M. A., Grill, W. M., & Pelot, N. A. (2024). Highly efficient modeling and optimization of neural fiber responses to electrical stimulation. *Nature Communications*, 15(1). <https://doi.org/10.1038/s41467-024-51709-8>

Histology-based computational models of implanted human cervical vagus nerve stimulation with the LivaNova helical cuff electrode

DOI: 10.26275/7mdx-asxc **Dataset ID:** 311 **Dataset Version:** 3

Citation: Musselman, E. D., Davis, C., Grill, W. M., & Pelot, N. A. (2023). *Histology-*

based computational models of implanted human cervical vagus nerve stimulation with the LivaNova helical cuff electrode (Version 3) [Data set]. SPARC Portal. <https://doi.org/10.26275/7MDX-ASXC>

Dataset Citations

DOI: [doi:10.1088/1741-2552/acc42b](https://doi.org/10.1088/1741-2552/acc42b) [Citation]
Citation: Davis, C. J., Musselman, E. D., Grill, W. M., & Pelot, N. A. (2023). Fibers in smaller fascicles have lower activation thresholds with cuff electrodes due to thinner perineurium and smaller cross-sectional area. *Journal of Neural Engineering*, 20(2), 026032. <https://doi.org/10.1088/1741-2552/acc42b>

Molecular phenotype distribution of single rat intracardiac neurons

DOI: [10.26275/sp7z-ylun](https://doi.org/10.26275/sp7z-ylun) Dataset ID: 29 Dataset Version: 7

Citation: Achanta, S., Robbins, S., Moss, A., Gorky, J., Nieves, S., Tappan, S., Heal, M., Leung, C., Chen, J., Cheng, Z., Schwaber, J., & Vadigepalli, R. (2023). *Molecular phenotype distribution of single rat intracardiac neurons* (Version 7) [Data set]. SPARC Portal. <https://doi.org/10.26275/SP7Z-YLUN>

Dataset Citations

DOI: [doi:10.17504/protocols.io.bfxvjpn6](https://doi.org/10.17504/protocols.io.bfxvjpn6) [Protocol]
Citation: Robbins, S., Moss, A., Nieves, S., & Achanta, S. (2020). Molecular Phenotype Distribution of Single Rat ICN Neurons - Heart B v2. <https://doi.org/10.17504/protocols.io.bfxvjpn6>

DOI: [doi:10.17504/protocols.io.w56fg9e](https://doi.org/10.17504/protocols.io.w56fg9e) [Citation]
Citation: Molecular Phenotype Distribution of Single Rat ICN Neurons - Heart B v1. (2019). <https://doi.org/10.17504/protocols.io.w56fg9e>

DOI: [doi:10.1016/j.isci.2020.101140](https://doi.org/10.1016/j.isci.2020.101140) [Citation]
Citation: Achanta, S., Gorky, J., Leung, C., Moss, A., Robbins, S., Eisenman, L., Chen, J., Tappan, S., Heal, M., Farahani, N., Huffman, T., England, S., Cheng, Z. (Jack), Vadigepalli, R., & Schwaber, J. S. (2020). A Comprehensive Integrated Anatomical and Molecular Atlas of Rat Intrinsic Cardiac Nervous System. *IScience*, 23(6), 101140. <https://doi.org/10.1016/j.isci.2020.101140>

Identification of lung innervating sensory neurons and their target specificity in mouse (3)

DOI: [10.26275/ahqc-ldar](https://doi.org/10.26275/ahqc-ldar) Dataset ID: 354 Dataset Version: 1

Citation: Sun, X., & Verheyden, J. (2023). *Identification of lung innervating sensory neurons and their target specificity in mouse (3)* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/AHQC-LDAR>

Dataset Citations

DOI: [doi:10.17504/protocols.io.bw3pggjw](https://doi.org/10.17504/protocols.io.bw3pggjw) [Protocol]
Citation: Verheyden, J. (2021). Cubic Clearing and Whole Mount Imaging of Mouse Lung Lobes v1. <https://doi.org/10.17504/protocols.io.bw3pggjw>

High-throughput segmentation of rat unmyelinated axons by deep learning

DOI: 10.26275/eefp-azay **Dataset ID:** 226 **Dataset Version:** 2

Citation: Havton, L. A., Biscola, N. P., Plebani, E., Rajwa, B., Shemonti, A., Jaffey, D., Powley, T. L., Keast, J. R., Lu, K.-H., & Dundar, M. (2023). *High-throughput segmentation of rat unmyelinated axons by deep learning* (Version 2) [Data set]. SPARC Portal. <https://doi.org/10.26275/EEFP-AZAY>

Dataset Citations

DOI: doi:10.1038/s41598-022-04854-3 [Citation]
Citation: Plebani, E., Biscola, N. P., Havton, L. A., Rajwa, B., Shemonti, A. S., Jaffey, D., Powley, T., Keast, J. R., Lu, K.-H., & Dundar, M. M. (2022). High-throughput segmentation of unmyelinated axons by deep learning. *Scientific Reports*, 12(1). <https://doi.org/10.1038/s41598-022-04854-3>

DOI: doi:10.17504/protocols.io.xpxfmpn [Citation]
Citation: Biscola, N., & Havton, L. (2019). Nerve tissue processing for transmission electron microscopy (TEM) v1. <https://doi.org/10.17504/protocols.io.xpxfmpn>

DOI: doi:10.17504/protocols.io.bzwcp7aw [Citation]
Citation: Collection of rat vagal tissue samples for TEM imaging v1. (2021). <https://doi.org/10.17504/protocols.io.bzwcp7aw>

DOI: doi:10.17504/protocols.io.b2ssqeee [Citation]
Citation: R Keast, J., & Osborne, P. (2021). Intracardiac perfusion with fixative for ultrastructural neuroanatomical studies v1. <https://doi.org/10.17504/protocols.io.b2ssqeee>

DOI: doi:10.26275/k0mx-jcth [Citation]
Citation: Havton, L. A., Biscola, N. P., Plebani, E., Rajwa, B., Shemonti, A., Jaffey, D., Powley, T. L., Keast, J. R., Lu, K.-H., & Dundar, M. (2022). *High-throughput segmentation of rat unmyelinated axons by deep learning* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/K0MX-JCTH>

Reflex voiding in rat occurs at consistent bladder volume regardless of pressure or infusion rate

DOI: 10.26275/jh8n-lwdl **Dataset ID:** 357 **Dataset Version:** 1

Citation: Jaskowak, D., & Danziger, Z. C. (2023). *Reflex voiding in rat occurs at consistent bladder volume regardless of pressure or infusion rate* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/JH8N-LWDL>

Dataset Citations

DOI: doi:10.17504/protocols.io.n2bvj3xoblk5/v1 [Protocol]
Citation: J Jaskowak, D. (2023). Single-fill cystometry at varying bladder infusion rates in urethane anesthetized rats v1. <https://doi.org/10.17504/protocols.io.n2bvj3xoblk5/v1>

Mapping of dorsal root ganglia sensory nerve populations in the mouse lung

DOI: 10.26275/hhnz-div3 **Dataset ID:** 353 **Dataset Version:** 1

Citation: Kim, S.-H., Patil, M., & Taylor-Clark, T. (2023). *Mapping of dorsal root ganglia sensory nerve populations in the mouse lung* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/HHNZ-DIV3>

Dataset Citations

DOI: doi:10.17504/protocols.io.3byl4b6kjvo5/v1 [Protocol]
Citation: Kim, S.-H. (2022). Dissection and immunohistochemistry of mouse lung v1.
<https://doi.org/10.17504/protocols.io.3byl4b6kjvo5/v1>

DOI: doi:10.17504/protocols.io.n92ldz6z9v5b/v1 [Protocol]
Citation: Kim, S.-H. (2022). Intraganglionic injection of AAV into thoracic dorsal root ganglia in mice v1. <https://doi.org/10.17504/protocols.io.n92ldz6z9v5b/v1>

Chronic intermittent hypoxia remodels catecholaminergic innervation in mouse atria

DOI: 10.26275/qdv4-0vx5 Dataset ID: 362 Dataset Version: 1

Citation: Bizanti, A. (G., Zhang, Y., Toledo, Z., Harden, S. W., Mistareehi, A., Chen, J., Gozal, D., Heal, M., Christie, R., Hunter, P., Tappan, S., Paton, J., & Cheng, Z. (2023). *Chronic intermittent hypoxia remodels catecholaminergic innervation in mouse atria* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/QDV4-0VX5>

Dataset Citations

DOI: doi:10.17504/protocols.io.14egn3jml5d/v1 [Protocol]
Citation: Bizanti, A., Zhang, Y., Toledo, Z., & Bendowski, K. (2023). Chronic intermittent hypoxia remodels catecholaminergic innervation in mouse atria v1.
<https://doi.org/10.17504/protocols.io.14egn3jml5d/v1>

Quantification of thickness of the gastric muscle in the rat stomach

DOI: 10.26275/tlgo-dfke Dataset ID: 367 Dataset Version: 1

Citation: Di Natale, M., Patten, L., Furness, J., & Stebbing, M. (2024). *Quantification of thickness of the gastric muscle in the rat stomach* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/TLGO-DFKE>

Dataset Citations

DOI: doi:10.17504/protocols.io.bybtpsnn [Protocol]
Citation: R. Di Natale, M., Patten, L., Stebbing, M., & Furness, J. (2021). Histological quantification of thickness of the mucosal and muscle layers of the rat stomach v1.
<https://doi.org/10.17504/protocols.io.bybtpsnn>

Synaptic components function and modulation characterized by GCaMP6f calcium imaging in cholinergic myenteric ganglion neurons

DOI: 10.26275/yv7l-9fst Dataset ID: 368 Dataset Version: 1

Citation: Margiotta, J., Howard, M., Smith-Edwards, K., Albers, K., & Davis, B. (2024). *Synaptic components function and modulation characterized by GCaMP6f calcium imaging in cholinergic myenteric ganglion neurons* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/YV7L-9FST>

Dataset Citations

DOI: doi:10.1016/j.jcmgh.2021.08.016 [Originating Publication]
Citation: Nestor-Kalinoski, A., Smith-Edwards, K. M., Meerschaert, K., Margiotta, J. F., Rajwa, B., Davis, B. M., & Howard, M. J. (2022). Unique Neural Circuit Connectivity of Mouse Proximal, Middle, and Distal Colon Defines Regional Colonic Motor Patterns. *Cellular and Molecular Gastroenterology and Hepatology*, 13(1), 309-337.e3.
<https://doi.org/10.1016/j.jcmgh.2021.08.016>

Distribution and morphology of calcitonin gene-related peptide (CGRP) innervation in flat mounts of whole rat atria and ventricles

DOI: 10.26275/86ve-meck Dataset ID: 373 Dataset Version: 1

Citation: Chen, J., Bendowski, K., Bizanti, A. (G.), Hoover, D., Gozal, D., Shivkumar, K., & Cheng, Z. (2024). *Distribution and morphology of calcitonin gene-related peptide (CGRP) innervation in flat mounts of whole rat atria and ventricles* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/86VE-MECK>

Dataset Citations

DOI: doi:10.17504/protocols.io.3bvl4qd38vo5/v1 [Protocol]
Citation: Chen, J. (2023). Distribution and Morphology of Calcitonin Gene-Related Peptide (CGRP) Innervation in Flat Mounts of Whole Rat Atria and Ventricles v1.
<https://doi.org/10.17504/protocols.io.3bvl4qd38vo5/v1>

Electrocardiogram recordings in mice during vagus nerve stimulation

DOI: 10.26275/eauv-gxwl Dataset ID: 375 Dataset Version: 1

Citation: Huffman, W., Pelot, N. A., & Grill, W. M. (2024). *Electrocardiogram recordings in mice during vagus nerve stimulation* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/EAUV-GXWL>

Dataset Citations

DOI: doi:10.17504/protocols.io.5jyl8pop7g2w/v1 [Protocol]
Citation: Huffman, W., A Pelot, N., & Grill, W. (2024). Acute testing of temporal patterns of vagus nerve stimulation on physiological outcomes in mouse v1.
<https://doi.org/10.17504/protocols.io.5jyl8pop7g2w/v1>

Electromyogram recordings in mice during vagus nerve stimulation

DOI: 10.26275/2xys-dleh Dataset ID: 376 Dataset Version: 1

Citation: Huffman, W., Pelot, N. A., & Grill, W. M. (2024). *Electromyogram recordings in mice during vagus nerve stimulation* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/2XYS-DLEH>

Dataset Citations

DOI: doi:10.17504/protocols.io.5jyl8pop7g2w/v1 [Protocol]
Citation: Huffman, W., A Pelot, N., & Grill, W. (2024). Acute testing of temporal patterns of vagus nerve stimulation on physiological outcomes in mouse v1.
<https://doi.org/10.17504/protocols.io.5jyl8pop7g2w/v1>

A mathematical model for simulating the neural regulation of phasic contractions and slow waves in the distal stomach

DOI: 10.26275/ixhd-0pfa Dataset ID: 379 Dataset Version: 1

Citation: Athavale, O., Iavarone, E., Du, P., & Cheng, L. K. (2024). *A mathematical model for simulating the neural regulation of phasic contractions and slow waves in the distal stomach* (Version 1) [Data set]. SPARC Portal.
<https://doi.org/10.26275/IXHD-0PFA>

Dataset Citations

DOI: doi:10.6084/m9.figshare.23624622 [Citation]
Citation: Athavale, O., Avci, R., Clark, A., Wang, X., Di Natale, M., FURNESS, J. O. H. N., Liu, Z., Cheng, L., & Du, P. (2024). *Model and analysis source code for "Neural regulation of slow waves and phasic contractions in the distal stomach: A mathematical model"*. figshare.
<https://doi.org/10.6084/M9.FIGSHARE.23624622>

DOI: doi:10.6084/m9.figshare.23624622.v2 [Citation]
Citation: Athavale, O., Avci, R., Clark, A., Wang, X., Di Natale, M., FURNESS, J. O. H. N., Liu, Z., Cheng, L., & Du, P. (2024). *Model and analysis source code for "Neural regulation of slow waves and phasic contractions in the distal stomach: A mathematical model"*. figshare.
<https://doi.org/10.6084/M9.FIGSHARE.23624622.V2>

DOI: doi:10.6084/m9.figshare.23624622.v3 [Citation]
Citation: Athavale, O., Avci, R., Clark, A., Wang, X., Di Natale, M., FURNESS, J. O. H. N., Liu, Z., Cheng, L., & Du, P. (2024). *Model and analysis source code for "Neural regulation of slow waves and phasic contractions in the distal stomach: A mathematical model"*. figshare.
<https://doi.org/10.6084/M9.FIGSHARE.23624622.V3>

Mapping of vagal sensory nerve populations and their brainstem projections in mice

DOI: 10.26275/zphj-6qnb Dataset ID: 381 Dataset Version: 1

Citation: Kim, S.-H., & Taylor-Clark, T. (2024). *Mapping of vagal sensory nerve populations and their brainstem projections in mice* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/ZPHJ-6QNB>

Dataset Citations

DOI: doi:10.17504/protocols.io.baumieu6 [Protocol]
Citation: Taylor-Clark, T., & Kim, S.-H. (2019). Dissection and immunohistochemistry of mouse vagal ganglia v3. <https://doi.org/10.17504/protocols.io.baumieu6>

DOI: doi:10.17504/protocols.io.4r3l275y3g1y/v1 [Protocol]
Citation: Kim, S.-H. (2022). Dissection and immunohistochemistry of mouse brainstem v1. <https://doi.org/10.17504/protocols.io.4r3l275y3g1y/v1>

Calcitonin gene-related peptide - immunoreactive (CGRP-IR) axon innervation of mouse stomach

DOI: 10.26275/cljd-yjqy Dataset ID: 230 Dataset Version: 2

Citation: Nguyen, D., Ma, J., Madas, J., Mistareehi, A., Chen, J., Heal, M., Baldwin, S., Tappan, S., Lin, M., Christie, R., Hunter, P., Powley, T. L., & Cheng, Z. (2024). *Calcitonin gene-related peptide - immunoreactive (CGRP-IR) axon innervation of mouse stomach* (Version 2) [Data set]. SPARC Portal.
<https://doi.org/10.26275/CLJD-YJQY>

Dataset Citations

DOI: doi:10.17504/protocols.io.6qpvr6k7zvmk/v1 [Protocol]

Citation: Mapping CGRP-IR innervation of male mice stomach with NeuroLucida 360 v1. (2022). <https://doi.org/10.17504/protocols.io.6qpvr6k7zvmk/v1>

Intravenously injected AAV9 transduced interstitial cells of Cajal in mouse colon

DOI: 10.26275/cheq-otb2 Dataset ID: 382 Dataset Version: 1

Citation: Wang, L., & Tache, Y. (2024). *Intravenously injected AAV9 transduced interstitial cells of Cajal in mouse colon* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/CHEQ-OTB2>

Dataset Citations

DOI: doi:10.17504/protocols.io.bqavmse6 [Protocol]

Citation: Multicolor adeno-associate virus labeling and 3D digital tracing of enteric plexus in mouse proximal colon v1. (2020). <https://doi.org/10.17504/protocols.io.bqavmse6>

DOI: doi:10.17504/protocols.io.bqi2muge [Protocol]

Citation: Wang, L., pq Yuan, P.-Q., Liang, H., & Tache, Y. (2020). Immunofluorescent methods for antibody test in mouse colon v1. <https://doi.org/10.17504/protocols.io.bqi2muge>

Substance P-immunoreactive axons in the antrum-pylorus-duodenum of mice

DOI: 10.26275/1ito-vvqo Dataset ID: 385 Dataset Version: 1

Citation: Mistareehi, A., Bendowski, K., Bizanti, A. (G.), Madas, J., Zhang, Y., Kwiat, A. M., Nguyen, D., Kogut, N., Ma, J., Chen, J., & Cheng, Z. (2024). *Substance P-immunoreactive axons in the antrum-pylorus-duodenum of mice* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/1ITO-VVQO>

Dataset Citations

DOI: doi:10.17504/protocols.io.e6nvwj41zlmk/v1 [Protocol]

Citation: Topographical distribution and morphology of SP-IR axons in the antrum, pylorus, and duodenum of mice v1. (2023). <https://doi.org/10.17504/protocols.io.e6nvwj41zlmk/v1>

Transduction of systemically administered adeno-associated virus in the colonic enteric nervous system of adult mice

DOI: 10.26275/pc5x-w5l3 Dataset ID: 386 Dataset Version: 1

Citation: Wang, L., & Tache, Y. (2024). *Transduction of systemically administered adeno-associated virus in the colonic enteric nervous system of adult mice* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/PC5X-W5L3>

Dataset Citations

DOI: doi:10.17504/protocols.io.84ahyse [Protocol]

Citation: C. Challis, R., Ravindra Kumar, S., Y. Chan, K., Challis, C., Beadle, K., J. Jang, M., Min Kim, H., S. Rajendran, P., D. Tompkins, J., Shivkumar, K., E. Deverman, B., & Gradinaru, V. (2019). Systemic AAV vectors for widespread and targeted gene delivery in rodents v1. <https://doi.org/10.17504/protocols.io.84ahyse>

DOI: doi:10.17504/protocols.io.bqavmse6 [Protocol]

Citation: Multicolor adeno-associate virus labeling and 3D digital tracing of enteric plexus in mouse proximal colon v1. (2020). <https://doi.org/10.17504/protocols.io.bqavmse6>

DOI: doi:10.17504/protocols.io.bqi2muge [Protocol]

Citation: Wang, L., pq Yuan, P.-Q., Liang, H., & Tache, Y. (2020). Immunofluorescent methods for antibody test in mouse colon v1. <https://doi.org/10.17504/protocols.io.bqi2muge>

Light microscopic analysis of synaptic input to neurons in the rat major pelvic ganglion

DOI: 10.26275/xw1e-oea3 Dataset ID: 383 Dataset Version: 1

Citation: Osborne, P., Yang, A., Keast, J. R., Bista, P., & Morrison, V. (2024). *Light microscopic analysis of synaptic input to neurons in the rat major pelvic ganglion* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/XW1E-OEA3>

Dataset Citations

DOI: doi:10.17504/protocols.io.w2xfgrn [Protocol]

Citation: R Keast, J., & B Osborne, P. (2019). Use of tracer dyes to label neural projections to lower urinary tract organs v1. <https://doi.org/10.17504/protocols.io.w2xfgrn>

DOI: doi:10.17504/protocols.io.bahzib76 [Protocol]

Citation: R Keast, J., B Osborne, P., & Wiedmann, N. (2019). Intracardiac perfusion with fixative for anatomical studies v1. <https://doi.org/10.17504/protocols.io.bahzib76>

DOI: doi:10.17504/protocols.io.bakcicw [Protocol]

Citation: R Keast, J., & B Osborne, P. (2019). Immunohistochemical labeling of thick cryosections from pelvic ganglia v1. <https://doi.org/10.17504/protocols.io.bakcicw>

DOI: doi:10.17504/protocols.io.bakdics6 [Protocol]

Citation: R Keast, J., & B Osborne, P. (2019). Confocal microscopy and characterization of synaptic boutons associated with ganglion neurons v1. <https://doi.org/10.17504/protocols.io.bakdics6>

DOI: doi:10.17504/protocols.io.bakiicue [Protocol]

Citation: R Keast, J., & B Osborne, P. (2019). Light microscopic analysis of synaptic input to neurons in the rat major pelvic ganglion [keast-003] v1. <https://doi.org/10.17504/protocols.io.bakiicue>

Vasculature in mouse colon and relationship with enteric nervous system glia and macrophages

DOI: 10.26275/hipp-yfnn Dataset ID: 387 Dataset Version: 1

Citation: Wang, L., & Tache, Y. (2024). *Vasculature in mouse colon and relationship with enteric nervous system glia and macrophages* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/HIPP-YFNN>

Dataset Citations

DOI: doi:10.17504/protocols.io.bqi2muge [Protocol]

Citation: Wang, L., pq Yuan, P.-Q., Liang, H., & Tache, Y. (2020). Immunofluorescent methods for antibody test in mouse colon v1. <https://doi.org/10.17504/protocols.io.bqi2muge>

Vagal preganglionic axons arborize in myenteric plexus into two patterns generating nitrergic and non-nitrergic postganglionic motor units

DOI: 10.26275/3enb-ctj6 Dataset ID: 388 Dataset Version: 1

Citation: Powley, T. L., Jaffey, D., Phillips, R., Rajwa, B., McAdams, J. L., Baronowsky, E. A., Chesney, L., Black, D., & Evans, C. (2024). *Vagal preganglionic axons arborize in myenteric plexus into two patterns generating nitrergic and non-nitrergic postganglionic motor units* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/3ENB-CTJ6>

Dataset Citations

DOI: doi:10.17504/protocols.io.2iqgcdw [Protocol]
Citation: Jaffey, D., Powley, T., Mcadams, J., & Phillips, R. (2019). High resolution labeling of vagal efferent fibers using Dextran-Biotin with counterstaining v1. <https://doi.org/10.17504/protocols.io.2iqgcdw>

Transcriptomic and neurochemical analysis of the stellate ganglia in mice highlights sex differences

DOI: 10.26275/rdr5-x5bo Dataset ID: 208 Dataset Version: 3

Citation: Bayles, R., Denfeld, Q., Woodward, W., & Habecker, B. (2024). *Transcriptomic and neurochemical analysis of the stellate ganglia in mice highlights sex differences* (Version 3) [Data set]. SPARC Portal. <https://doi.org/10.26275/RDR5-X5BO>

Dataset Citations

DOI: doi:10.1038/s41598-018-27306-3 [Originating Publication]
Citation: Bayles, R. G., Olivas, A., Denfeld, Q., Woodward, W. R., Fei, S. S., Gao, L., & Habecker, B. A. (2018). Transcriptomic and neurochemical analysis of the stellate ganglia in mice highlights sex differences. *Scientific Reports*, 8(1). <https://doi.org/10.1038/s41598-018-27306-3>

Targeting bladder function with network-specific epidural stimulation after chronic spinal cord injury

DOI: 10.26275/t2ve-vu9o Dataset ID: 378 Dataset Version: 2

Citation: Medina Aguinaga, D., Herrity, A., Aslan, S. C., Mesbah, S., Siu, R., Kalvakuri, K., Ugiliweneza, B., Mohamed, A., Hubscher, C., & Harkema, S. (2024). *Targeting bladder function with network-specific epidural stimulation after chronic spinal cord injury* (Version 2) [Data set]. SPARC Portal. <https://doi.org/10.26275/T2VE-VU9O>

Dataset Citations

DOI: doi:10.17504/protocols.io.8epv5x2w6g1b/v1 [Protocol]
Citation: Medina Aguinaga, D., & N. Herrity, A. (2023). Spinal cord epidural stimulation to control bladderin spinal cord injury patients v1. <https://doi.org/10.17504/protocols.io.8epv5x2w6g1b/v1>

DOI: doi:10.17504/protocols.io.8epv5x2w6g1b/v2 [Protocol]
Citation: Medina Aguinaga, D., & N. Herrity, A. (2024). Spinal cord epidural stimulation to control bladderin spinal cord injury patients v2. <https://doi.org/10.17504/protocols.io.8epv5x2w6g1b/v2>

Excitation properties of computational models of unmyelinated peripheral axons

DOI: 10.26275/mgyp-rlmr **Dataset ID:** 86 **Dataset Version:** 6

Citation: Pelot, N. A., Catherall, D. C., Thio, B. J., & Grill, W. M. (2024). *Excitation properties of computational models of unmyelinated peripheral axons* (Version 6) [Data set]. SPARC Portal. <https://doi.org/10.26275/MGYP-RLMR>

Dataset Citations

DOI: doi:10.1152/jn.00315.2020 [Originating Publication]
Citation: Pelot, N. A., Catherall, D. C., Thio, B. J., Titus, N. D., Liang, E. D., Henriquez, C. S., & Grill, W. M. (2021). Excitation properties of computational models of unmyelinated peripheral axons. *Journal of Neurophysiology*, 125(1), 86â104. <https://doi.org/10.1152/jn.00315.2020>

Fabbri-based composite SAN model

DOI: 10.26275/ybmm-6crq **Dataset ID:** 157 **Dataset Version:** 5

Citation: Garny, A., & Hunter, P. (2024). *Fabbri-based composite SAN model* (Version 5) [Data set]. SPARC Portal. <https://doi.org/10.26275/YBMM-6CRQ>

Dataset Citations

DOI: doi:10.1113/jp273259 [Originating Publication]
Citation: Fabbri, A., Fantini, M., Wilders, R., & Severi, S. (2017). Computational analysis of the human sinus node action potential: model development and effects of mutations. *The Journal of Physiology*, 595(7), 2365â2396. Portico. <https://doi.org/10.1113/jp273259>

Computational analysis of the human sinus node action potential - Model development and effects of mutations

DOI: 10.26275/je6r-kbu8 **Dataset ID:** 135 **Dataset Version:** 7

Citation: Garny, A., & Hunter, P. (2024). *Computational analysis of the human sinus node action potential - Model development and effects of mutations* (Version 7) [Data set]. SPARC Portal. <https://doi.org/10.26275/JE6R-KBU8>

Dataset Citations

DOI: doi:10.1113/jp273259 [Originating Publication]
Citation: Fabbri, A., Fantini, M., Wilders, R., & Severi, S. (2017). Computational analysis of the human sinus node action potential: model development and effects of mutations. *The Journal of Physiology*, 595(7), 2365â2396. Portico. <https://doi.org/10.1113/jp273259>

Neurochemical anatomy of porcine right atrial ganglionated plexus and sinoatrial node

DOI: 10.26275/jjvg-rawx **Dataset ID:** 394 **Dataset Version:** 1

Citation: Hoover, D., Smith, E., Peirce, S., Poston, M., Hanna, P., Shivkumar, K., & Ardell, J. (2024). *Neurochemical anatomy of porcine right atrial ganglionated plexus and sinoatrial node* (Version 1) [Data set]. SPARC Portal. <https://doi.org/10.26275/JJVG-RAWX>

Dataset Citations

DOI: doi:10.1101/2024.04.04.588174 [Originating Publication]
Citation: Tompkins, J. D., Hoover, D. B., Havton, L. A., Patel, J. C., Cho, Y., Smith, E. H., Biscola, N. P., Ajijola, O. A., Shivkumar, K., & Ardell, J. L. (2024). Comparative specialization of intrinsic cardiac neurons in humans, mice, and pigs. <https://doi.org/10.1101/2024.04.04.588174>

Characterization of projections of longitudinal muscle motor neurons in human colon

DOI: 10.26275/y4kn-gzok **Dataset ID:** 125 **Dataset Version:** 6

Citation: Brookes, S., Humenick, A., Chen, N., Lauder, C. I., Wattchow, D. A., Zagorodnyuk, V. P., Dinning, P., Spencer, N. J., & Costa, M. (2024). *Characterization of projections of longitudinal muscle motor neurons in human colon* (Version 6) [Data set]. SPARC Portal. <https://doi.org/10.26275/Y4KN-GZOK>

Dataset Citations

DOI: doi:10.1111/nmo.13685 [Originating Publication]
Citation: Humenick, A., Chen, B. N., Lauder, C. I. W., Wattchow, D. A., Zagorodnyuk, V. P., Dinning, P. G., Spencer, N. J., Costa, M., & Brookes, S. J. H. (2019). Characterization of projections of longitudinal muscle motor neurons in human colon. *Neurogastroenterology & Motility*, 31(10). Portico. <https://doi.org/10.1111/nmo.13685>

Generic rat stomach scaffold

DOI: 10.26275/njim-n9og **Dataset ID:** 105 **Dataset Version:** 6

Citation: Lin, M., Christie, R., & Hunter, P. (2024). *Generic rat stomach scaffold* (Version 6) [Data set]. SPARC Portal. <https://doi.org/10.26275/NJIM-N9OG>

Dataset Citations

DOI: doi:10.1109/tbme.2023.3234509 [Citation]
Citation: Wang, X., Cao, J., Han, K., Choi, M., She, Y., Scheven, U. M., Avci, R., Du, P., Cheng, L. K., Natale, M. R. D., Furness, J. B., & Liu, Z. (2023). Diffeomorphic Surface Modeling for MRI-Based Characterization of Gastric Anatomy and Motility. *IEEE Transactions on Biomedical Engineering*, 70(7), 2046â2057. <https://doi.org/10.1109/tbme.2023.3234509>

DOI: doi:10.1109/embc48229.2022.9871314 [Citation]
Citation: Avci, R., Wickens, J. D., Sangi, M., Athavale, O. N., Di Natale, M. R., Furness, J. B., Du, P., & Cheng, L. K. (2022). A Computational Model of Biophysical Properties of the Rat Stomach Informed by Comprehensive Analysis of Muscle Anatomy. 2022 44th Annual International Conference of the IEEE Engineering in Medicine & Biology Society (EMBC), 4954â4957. <https://doi.org/10.1109/embc48229.2022.9871314>

Comparison of the intrinsic cardiac nervous system across male and female rat hearts

DOI: 10.26275/y1rw-wufu **Dataset ID:** 77 **Dataset Version:** 5

Citation: Leung, C., Robbins, S., Moss, A., Heal, M., Osanlouy, M., Christie, R.,

Huffman, T., Farahani, N., Monteith, C., Chen, J., Hunter, P., Tappan, S., Vadigepalli, R., Cheng, Z., & Schwaber, J. (2024). *Comparison of the intrinsic cardiac nervous system across male and female rat hearts* (Version 5) [Data set]. SPARC Portal. <https://doi.org/10.26275/Y1RW-WUFU>

Dataset Citations

DOI: [doi:10.1007/s12021-021-09530-x](https://doi.org/10.1007/s12021-021-09530-x) [Citation]
Citation: Sullivan, A. E., Tappan, S. J., Angstman, P. J., Rodriguez, A., Thomas, G. C., Hoppes, D. M., Abdul-Karim, M. A., Heal, M. L., & Glaser, J. R. (2021). A Comprehensive, FAIR File Format for Neuroanatomical Structure Modeling. *Neuroinformatics*, 20(1), 221â240. <https://doi.org/10.1007/s12021-021-09530-x>

DOI: [doi:10.17504/protocols.io.bdz5i786](https://doi.org/10.17504/protocols.io.bdz5i786) [Citation]
Citation: Leung, C., Heal, M., Robbins, S., Moss, A., Monteith, C., & Tappan, S. (2020). Single-Cell ICN Neuron Mapping and 3D Heart Reconstruction with Tissue Mapper v1. <https://doi.org/10.17504/protocols.io.bdz5i786>

DOI: [doi:10.1101/2020.09.22.306670](https://doi.org/10.1101/2020.09.22.306670) [Citation]
Citation: Sullivan, A. E., Tappan, S. J., Angstman, P. J., Rodriguez, A., Thomas, G. C., Hoppes, D. M., Abdul-Karim, M. A., Heal, M. L., & Glaser, J. R. (2020). A comprehensive, FAIR file format for neuroanatomical structure modeling. <https://doi.org/10.1101/2020.09.22.306670>

DOI: [doi:10.1016/j.isci.2021.102795](https://doi.org/10.1016/j.isci.2021.102795) [Citation]
Citation: Leung, C., Robbins, S., Moss, A., Heal, M., Osanlouy, M., Christie, R., Farahani, N., Monteith, C., Chen, J., Hunter, P., Tappan, S., Vadigepalli, R., Cheng, Z. (Jack), & Schwaber, J. S. (2021). 3D single cell scale anatomical map of sex-dependent variability of the rat intrinsic cardiac nervous system. *IScience*, 24(7), 102795. <https://doi.org/10.1016/j.isci.2021.102795>