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 Consortium. 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 Consortium. 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 Consortium. https://doi.org/10.26275/QH3Q-ELJ6

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: 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., ⦠Hewage, E. (2023). Online Bayesian Optimization of Nerve Stimulation. https://doi.org/10.1101/2023.08.30.555315

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., ⦠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 Consortium. 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 Consortium. https://doi.org/10.26275/MVWC-FNQM

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:10.1111/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 & (amp; 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 Consortium. 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 Consortium. 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

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

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 Consortium. https://doi.org/10.26275/DWZU-XTMJ

Dataset Citations

DOI: doi:10.17504/protocols.io.wjrfcm6 [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.wjrfcm6

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 Consortium. https://doi.org/10.26275/XMSP-WWTU

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 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 Consortium. https://doi.org/10.26275/W4MY-PUQM

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-qqpf 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 Consortium. 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., & Fahkry, J. (2019). *Quantification of the relationship between rat gastric nerve fibers and enteroendocrine cells (EEC)* (Version 2) [Data set]. SPARC Consortium. 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., & Fahkry, J. (2019). *Quantification of rat gastric enteroendocrine cells* (Version 3) [Data set]. SPARC Consortium. https://doi.org/10.26275/O9QR-L4X9

Dataset Citations

DOI: doi: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 [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 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 Consortium. https://doi.org/10.26275/SPFH-LX9G

Dataset Citations

DOI: doi: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 [Originating Publication] Citation: Aristovich, K., DonegĂi, 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 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 Consortium. https://doi.org/10.26275/WZRY-SF7V

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: 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

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 Consortium. 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: 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

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 Consortium. 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: 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: nitrergic and non-nitrergic postganglionic motor pools? American Journal of Physiology-Regulatory, Integrative and Comparative Physiology, 324(3), R305âR316. https://doi.org/10.1152/ajpregu.00260.2022

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

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 Consortium. 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 Consortium. 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., Virág, L., Varró, 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 Consortium. 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 pseudorables 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 Consortium. 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 Consortium. 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 Consortium. https://doi.org/10.26275/PRJD-JHOC

Dataset Citations

DOI: doi:10.17504/protocols.io.wxrffm6 [Protocol] Citation: Staining and imaging of mouse submandibular ganglion by α-bungarotoxin and nanosensor v1. (2019). https://doi.org/10.17504/protocols.io.wxrffm6

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 Consortium. https://doi.org/10.26275/NNYT-BQPG

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 (5-HT) Immunohistochemistry Protocol in Rat Tissues Labeled with Cholera Toxin Bfragment 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 2A Receptor (5-HT2AR) 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.2kigcue [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.2kigcue

DOI: doi:10.17504/protocols.io.2kjgcun [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.2kjgcun

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 Consortium. 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 Consortium. https://doi.org/10.26275/PGR9-BK2E

Dataset Citations

DOI: doi:10.17504/protocols.io.6bqhamw [Protocol]
Citation: SPARC_Duke_PelotGrill_OT2OD025340_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 Consortium. https://doi.org/10.26275/Z3AB-7J9Y

Dataset Citations

DOI: doi: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 [Protocol]
Citation: SPARC_Duke_PelotGrill_OT2OD025340_RatVagusNerve_Collection_Histology_Microscopy v2. (2020).
https://doi.org/10.17504/protocols.io.bh4bj8sn

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

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 Consortium. https://doi.org/10.26275/BOE7-1BMS

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 Consortium. 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 Consortium. https://doi.org/10.26275/JG3K-Z5QM

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 câFos and EGRâ1/Zif268 activity maps of rat sacral spinal cord following cystometryâinduced micturition. Journal of Comparative Neurology, 529(2), 311â326. 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 Consortium. https://doi.org/10.26275/8PC2-RHU2

Dataset Citations

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

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 Consortium. https://doi.org/10.26275/ILB9-0E2A

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: 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: 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:10.12688/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/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:10.3389/fnins.2020.601479 [Originating Publication]

Citation: Pelot, N. A., Goldhagen, G. B., Čariello, 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 Consortium.

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 Consortium. 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: 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: 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:10.1101/2021.08.08.455581 [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:10.12688/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: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 Consortium. https://doi.org/10.26275/ILKM-9F8R

Dataset Citations

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

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 Consortium. https://doi.org/10.26275/TV7G-O8FF

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 Consortium. 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

Excitation properties of computational models of unmyelinated peripheral axons

DOI: 10.26275/iiwv-k07f Dataset ID: 86 Dataset Version: 3

Citation: Pelot, N. A., Catherall, D. C., Thio, B. J., & Grill, W. M. (2020). *Excitation properties of computational models of unmyelinated peripheral axons* (Version 3) [Data set]. SPARC Consortium. https://doi.org/10.26275/IIWV-K07F

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

DOI: 10.1152/jn.00315.2020 [Citation]
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

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

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 vagotopy 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: 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 vagotopy 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

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 vagotopy 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 Consortium. https://doi.org/10.26275/FCRD-LBID

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.bjfzkjp6 [Protocol]

Citation: Vesselucida 360 Protocol for Segmenting and Analyzing Human Islet Microvasculature

v1. (2020). https://doi.org/10.17504/protocols.io.bjfzkjp6

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 Consortium. 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 Consortium. 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 Consortium. 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 Consortium. 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

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 Consortium. 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 Consortium. 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: 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 Consortium. 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 Consortium. 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 Consortium. 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 Consortium. 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 Consortium. https://doi.org/10.26275/56H4-YPUA

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 Consortium. 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 Consortium. https://doi.org/10.26275/ADVV-1AWO

Dataset Citations

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

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 Consortium. https://doi.org/10.26275/IMBG-

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.bfzcjp2w [Protocol]

Citation: SPARC Cat - Sham Control Chronic Cat 2, Day 0 v1. (2020).

https://doi.org/10.17504/protocols.io.bfzcjp2w

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.bfzijp4e [Protocol]

Citation: SPARC Cat - Sham Control Chronic Implant Cat 4, Day 0 v1. (2020).

https://doi.org/10.17504/protocols.io.bfzijp4e

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.bfzpjp5n [Protocol]

Citation: SPARC Cat - Sham Control Chronic Cat 3, Day 14 v1. (2020).

https://doi.org/10.17504/protocols.io.bfzpjp5n

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) [Data set]. SPARC Consortium. https://doi.org/10.26275/0KHE-2OS4

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 immunhistochemical 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 immunhistochemical 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 Consortium. 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 Consortium. 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 Consortium. https://doi.org/10.26275/J4HE-9SPQ

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 Consortium. https://doi.org/10.26275/17DL-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

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

DOI: 10.26275/ek1m-xgw1 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 Consortium. 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 Consortium. https://doi.org/10.26275/LKVZ-VRCY

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 Consortium. 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 Consortium. 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), 1251â1260. 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 Consortium. https://doi.org/10.26275/QCUK-A8TY

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

Citation: Vagus Nerve Stimulation Évoked 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: 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:10.1088/1741-2552/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

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 Consortium. 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-Aguiñaga, 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 Consortium. https://doi.org/10.26275/OFJA-GHOZ

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: 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: 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:10.1088/1741-2552/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:10.1101/2021.08.08.455581 [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:10.12688/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:10.3389/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 Consortium. https://doi.org/10.26275/PVIB-

Dataset Citations

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

Citation: Peripheral PRV injection - Kidney & Dryamp; Liver Protocol v1. (2021).

https://doi.org/10.17504/protocols.io.bujanuie

DOI: doi:10.1152/ajpregu.00079.2021 [Originating Publication]

Citation: Torres, H., Huesing, C., Burk, D. H., Molinas, A. J. R., Neuhuber, W. L., Berthoud, H.-R., MÃ1/4nzberg, 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/pb3I-251h Dataset ID: 37 Dataset Version: 3

Citation: Leung, C., Chen, J., Moss, A., Tappan, S., Heal, M., Huffman, T., Farahani, N., Eisenman, L., Cheng, Z., Vadigepalli, R., & Schwaber, J. (2021). Mapping of intrinsic cardiac nervous system (ICN) neurons in a 3D reconstructed rat heart (Version 3) [Data set]. SPARC Consortium. 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 Consortium. 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 Consortium. https://doi.org/10.26275/T8HE-Z5UU

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

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, rui, 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 Consortium. https://doi.org/10.26275/MHQ6-CSY1

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

DOI: doi:10.1002/cne.25031 [Originating Publication]
Citation: Huesing, C., QuallsâCreekmore, E., Lee, N., François, M., Torres, H., Zhang, R.,
Burk, D. H., Yu, S., Morrison, C. D., Berthoud, H., Neuhuber, W., & Mù/4nzberg, H. (2020).
Sympathetic innervation of inguinal white adipose tissue in the mouse. Journal of Comparative
Neurology, 529(7), 1465â1485. 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 Consortium. https://doi.org/10.26275/J5WC-RWCR

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 Consortium. 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:10.1016/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 Consortium. https://doi.org/10.26275/HRWW-ENZR

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

Citation: Robbins, S., Vadigepalli, R., & Schwaber, J. (2021). Cryosectioning, block face imaging and NissI 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 Consortium. 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 Consortium. 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 Consortium. 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/eoqv-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 Consortium. https://doi.org/10.26275/EOQV-OZXC

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 Consortium. 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 Consortium. 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

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

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 Consortium. https://doi.org/10.26275/E6VK-2LKY

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 Consortium. 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 Consortium. 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 Consortium. 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., MÃ1/anzberg, 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 Consortium. 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 & Diogy Society (EMBC). https://doi.org/10.1109/embc44109.2020.9175921

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 Consortium. https://doi.org/10.26275/G3XC-OZTW

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 Consortium. 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 Consortium. 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 Consortium.

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 Consortium. 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 fightâorâflight response in mouse and rabbit hearts. The Journal of Physiology, 597(15), 3867â3883. 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 Consortium. 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 Consortium. https://doi.org/10.26275/GVZT-OETI

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-Aguiűaga, 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 Consortium. 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 Consortium. https://doi.org/10.26275/OF13-IOKW

Dataset Citations

DOI: doi:10.17504/protocols.io.4r9gv96 [Protocol]
Citation: pq Yuan, P.-Q., & Tach©, 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.b4qrqvv6 [Protocol] Citation: Immunohistochemistry of porcine enteric neurons v1. (2022). https://doi.org/10.17504/protocols.io.b4qrqvv6

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 Consortium.

DOI: doi: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 Consortium. https://doi.org/10.26275/WUCY-LJUK

Dataset Citations

DOI: doi: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 Consortium. https://doi.org/10.26275/ELBL-3VXH

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

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 Consortium. https://doi.org/10.26275/CXEJ-BM2V

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

Citation: M Wright, C., & Robert O Heuckeroth, not provided. (2019). Processing Human Colon & https://www.document.com/specifications/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 Consortium. 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/qskp-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 Consortium. https://doi.org/10.26275/QSKP-AWPU

Dataset Citations

DOI: doi:10.17504/protocols.io.bqppmvmn [Protocol]
Citation: Heredia, D., & Gould, T. (2020). Optogenetically inhibiting enteric neurons in the murine large intestine v1. https://doi.org/10.17504/protocols.io.bqppmvmn

Transcriptomic and neurochemical analysis of the stellate ganglia in mice highlights sex differences

DOI: 10.26275/e3cf-ofgn Dataset ID: 208 Dataset Version: 2

Citation: Bayles, R., Denfeld, Q., Woodward, W., & Habecker, B. (2022). *Transcriptomic and neurochemical analysis of the stellate ganglia in mice highlights sex differences* (Version 2) [Data set]. SPARC Consortium. https://doi.org/10.26275/E3CF-OFGN

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

Ultrastructural analysis of human vagus nerve

DOI: 10.26275/rt8g-gu2v Dataset ID: 225 Dataset Version: 1

Citation: Havton, L. A., Biscola, N. P., Stern, E., Mihaylov, P. V., Kubal, C. A., Wo, J., Gupta, A., Baronowsky, E. A., Ward, M., Jaffey, D., & Powley, T. L. (2022). *Ultrastructural analysis of human vagus nerve* (Version 1) [Data set]. SPARC Consortium. https://doi.org/10.26275/RT8G-GU2V

Dataset Citations

DOI: doi:10.17504/protocols.io.xpxfmpn [Protocol]
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.b446qyze [Protocol] Citation: Collection of human vagal tissue samples for TEM imaging v2. (2022). https://doi.org/10.17504/protocols.io.b446qyze

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 Consortium. https://doi.org/10.26275/SIP4-IOYZ

Dataset Citations

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

Multicolor adeno-associated virus sparse labeling and 3D digital tracing of enteric plexus in mouse proximal colon

DOI: 10.26275/1uno-tynt Dataset ID: 221 Dataset Version: 3

Citation: Wang, L., Challis, C., Li, S., Fowlkes, C., Kumar, S. R. R., Yuan, P.-Q., Tache, Y., & Bains, M. (2022). *Multicolor adeno-associated virus sparse labeling and 3D digital tracing of enteric plexus in mouse proximal colon* (Version 3) [Data set]. SPARC Consortium. https://doi.org/10.26275/1UNO-TYNT

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

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 Consortium. 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., SatarayâRodriguez, A., Sherpa, R. T., Moshal, K. S., Agarwal, S. R., & Harvey, R. D. (2021). Compartmentation of β2âadrenoceptor 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 Consortium. 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

Calcitonin gene-related peptide immunoreactive (CGRP-IR) innervation of mouse stomach

DOI: 10.26275/upm9-v4ya Dataset ID: 230 Dataset Version: 1

Citation: Nguyen, D., Ma, J., Madas, J., Mistareehi, A., Chen, J., Powley, T. L., & Cheng, Z. (2022). Calcitonin gene-related peptide immunoreactive (CGRP-IR) innervation of mouse stomach (Version 1) [Data set]. SPARC Consortium. https://doi.org/10.26275/UPM9-V4YA

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

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 Consortium. https://doi.org/10.26275/ZUWB-QNQK

Dataset Citations

DOI: doi:10.17504/protocols.io.14egn76xpv5d/v1 [Protocol] Citation: Imaging of Calcium Dynamics in Vasoactive Intestinal Peptide-expressing Neurons of Enteric Nervous System v1. (2022). https://doi.org/10.17504/protocols.io.14egn76xpv5d/v1

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 Consortium. 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 Consortium. 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 Consortium. https://doi.org/10.26275/VZXW-KWDU

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., V¶r¶slakos, 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 & Danner, 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 Consortium. https://doi.org/10.26275/RMKT-5YPU

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), 1279â1296. 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 Consortium. 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 Consortium. 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 dichotomisingcolon 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 Consortium. https://doi.org/10.26275/IYTO-OXAY

DOI: doi:10.17504/protocols.io.x54v9y391g3e/v1 [Protocol] Citation: Harrington, A. (2022). Cholera Toxin Subunit B (CTB) Retrograde tracing from the

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 dichotomisingcolon 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

Consortium. 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

Calcium imaging and motility tracking of distinct

ganglionated plexus ablations v1. (2021). https://doi.org/10.17504/protocols.io.bvpbn5in

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

myenteric neuronal subsets in mice

Citation: Heredia, D., & Gould, T. (2022). *Calcium imaging and motility tracking of distinct myenteric neuronal subsets in mice* (Version 1) [Data set]. SPARC Consortium. 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 Consortium. 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 Consortium. 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 Consortium. https://doi.org/10.26275/YA41-6SFO

Dataset Citations

DOI: doi:10.17504/protocols.io.bp2l61rnzvqe/v1 [Protocol] Citation: Chen, L. (2022). Dorsal Root Ganglia stimulation-block colorectal afferents v1. https://doi.org/10.17504/protocols.io.bp2l61rnzvqe/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 Consortium. 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: 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 'vagotopy' 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 'vagotopy' using ultrasound* (Version 1) [Data set]. SPARC Consortium. 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 & Digital Ner

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 Consortium. 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 Consortium. 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 Consortium. https://doi.org/10.26275/JRJ4-ZRMJ

Dataset Citations

DOI: doi:10.17504/protocols.io.j8nlkknn5l5r/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.j8nlkknn5l5r/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 Consortium. 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 Consortium. https://doi.org/10.26275/23JE-UTE3

Dataset Citations

DOI: doi:10.17504/protocols.io.kxygxpx9dl8j/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.kxygxpx9dl8j/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 Consortium. https://doi.org/10.26275/VKVK-3HQE

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 Consortium. https://doi.org/10.26275/ZLY9-OW0W

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

Electrode design characterization for electrophysiology from swine peripheral nervous system

DOI: 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 Consortium. https://doi.org/10.26275/VM1H-K4KQ

Dataset Citations

DOI: doi: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: 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: doi:https://doi.org/10.26275/vm1h-k4kq [Citation]
Citation: Ludwig, K. A., & Derivation: Ludwig, K. A., & Loudwig, K. A., & Loudwig,

Single cell RNA sequencing of retrogradely labeled mouse stellate ganglion neurons

DOI: 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 Consortium. https://doi.org/10.26275/BVPU-CUZ7

DOI: doi:10.17504/protocols.io.wjrfcm6 [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.wjrfcm6

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.bp2l61drdvge/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 Consortium. https://doi.org/10.26275/PFJD-CETY

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 Consortium. 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 Consortium. https://doi.org/10.26275/EEDX-WRHI

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

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 Consortium. https://doi.org/10.26275/YT5S-PT6T

Dataset Citations

DOI: doi: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 [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 Consortium. https://doi.org/10.26275/Z4WA-DXJX

Dataset Citations

DOI: doi: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 Consortium. 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 Consortium. 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 Consortium. 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 Consortium. 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 Consortium. https://doi.org/10.26275/EBQL-CDNO

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

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 Consortium. 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 Consortium. https://doi.org/10.26275/MXNK-ATVT

Dataset Citations

DOI: doi: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

Generic rat stomach scaffold

DOI: 10.26275/iefx-c2qi Dataset ID: 105 Dataset Version: 5

Citation: Lin, M., Christie, R., & Hunter, P. (2022). Generic rat stomach scaffold (Version 5) [Data set]. SPARC Consortium. https://doi.org/10.26275/IEFX-C2QI

Dataset Citations

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 & Conference of the IEEE Engineering in Medicine &

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

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., Hanzlicek, B., Deng, K., & Yang, J. (2022). Chronic wireless Urological Monitor of Conscious Activity (UroMOCA) implantation in feline bladder (Version 2) [Data set]. SPARC Consortium. https://doi.org/10.26275/WCWR-HMCH

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

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 Consortium. 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., MÃ1/anzberg, 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 highdensity 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]. Pennsieve Discover. https://doi.org/10.26275/HBUU-CAUD

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: 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: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). <i>Lower urinary tract nerve responses to high-density epidural spinal cord stimulation in cats</i> (Version 1) [Data set]. Pennsieve Discover. 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 Consortium. https://doi.org/10.26275/EIKD-DG5C

Dataset Citations

DOI: doi:10.17504/protocols.io.eq2lynmeqvx9/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.eq2lynmeqvx9/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. (2022). *Calcium imaging tension recordings and pelet transit in mouse colon in response to direct electrical field stimulation* (Version 1) [Data set]. SPARC Consortium. 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

Computational analysis of the human sinus node action potential - Model development and effects

of mutations

DOI: 10.26275/zodp-mgzu Dataset ID: 135 Dataset Version: 3

Citation: Garny, A., & Hunter, P. (2022). Computational analysis of the human sinus node action potential - Model development and effects of mutations (Version 3) [Data set]. SPARC Consortium. https://doi.org/10.26275/ZODP-MGZU

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

Fabbri-based composite SAN model

DOI: 10.26275/qour-lluj Dataset ID: 157 Dataset Version: 3

Citation: Garny, A., & Hunter, P. (2022). Fabbri-based composite SAN model (Version 3) [Data set]. SPARC Consortium. https://doi.org/10.26275/QOUR-LLUJ

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

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 Consortium. https://doi.org/10.26275/HMWA-NQDU

Dataset Citations

DOI: doi:10.17504/protocols.io.b4p2qvqe [Protocol]

Citation: Thompson, N., Mastitskaya, S., Ravagli, É., 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: 10.26275/4igi-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 Consortium. 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 vagotopy 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/bign-mgy4 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 Consortium. 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 Consortium. https://doi.org/10.26275/5MKX-APZ9

Dataset Citations

DOI: 10.1101/2021.12.30.474265 [Citation]
Citation: Börner, 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

DOI: doi:10.1101/2021.12.30.474265 [Citation]
Citation: Börner, 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

Characterization of projections of longitudinal muscle motor neurons in human colon

DOI: 10.26275/g8aq-rjsp Dataset ID: 125 Dataset Version: 5

Citation: Brookes, S., Bains, M., Wattchow, D., Dinning, P., & Costa, M. (2022). *Characterization of projections of longitudinal muscle motor neurons in human colon* (Version 5) [Data set]. SPARC Consortium. https://doi.org/10.26275/G8AQ-B.ISP

Dataset Citations

DOI: doi:10.17504/protocols.io.btwinpce [Protocol] Citation: Protocol for & Doi: Proto

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

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 Consortium. 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 Consortium. 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., Fahkry, 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 Consortium. 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 Consortium. 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 Consortium. https://doi.org/10.26275/LCK3-F9V0

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.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 Consortium. 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., Sciullo, 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 Consortium. 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., Sciullo, 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 Consortium.

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 Consortium. 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: 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 Consortium. https://doi.org/10.26275/Z1WA-SPUB

Dataset Citations

DOI: doi:10.17504/protocols.io.eq2lypoymlx9/v1 [Protocol] Citation: Hoover, D. (2021). Protocol for ABC Immunohistochemistry and Quantifying Nerves v1. https://doi.org/10.17504/protocols.io.eq2lypoymlx9/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 Consortium. https://doi.org/10.26275/6F3G-WVZH

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.bfxgjpjw [Protocol] Citation: SPARC Pig2 acute wired ColoMOCA implantation v1. (2020). https://doi.org/10.17504/protocols.io.bfxgjpjw

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 Consortium. 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 multichannel 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 Consortium. 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/ki2u-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 Consortium. https://doi.org/10.26275/KJ2U-2UKF

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 Consortium. 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., & Delot, N. A. (2023). <i>Histology-based computational models of implanted human cervical vagus nerve stimulation with the LivaNova helical cuff electrode </i>
(Version 1) [Data set]. SPARC Consortium. https://doi.org/10.26275/KQG4-WBTP

Comparison of the intrinsic cardiac nervous system across male and female rat hearts

DOI: 10.26275/yh5c-5pjy Dataset ID: 77 Dataset Version: 4

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. (2023). *Comparison of the intrinsic cardiac nervous system across male and female rat hearts* (Version 4) [Data set]. SPARC Consortium. https://doi.org/10.26275/YH5C-5PJY

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: 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:10.1007/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:10.1101/2020.09.22.306670 [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 [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

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 Consortium. 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.n92ldzbmxv5b/v2 [Protocol]

Citation: Topographical mapping of sympathetic postganglionic innervation of mouse heart v2. (2023). https://doi.org/10.17504/protocols.io.n92ldzbmxv5b/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 Consortium. https://doi.org/10.26275/ZSOP-BYGV

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: Marmerstein, 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 Consortium. https://doi.org/10.26275/DO5J-M750.

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 Consortium. 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: 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:10.1088/1741-2552/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 Consortium. 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 Consortium. 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 Consortium. 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., Ajjjola, 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 Consortium. https://doi.org/10.26275/D41U-SOKG

Dataset Citations

DOI: doi:10.17504/protocols.io.bp7qmrmw [Protocol] Citation: Patel, B. (2020). Triaxial mechanical testing of dog colon samples v1. https://doi.org/10.17504/protocols.io.bp7qmrmw

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

DOI: 10.26275/6lga-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 Consortium. 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: 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:10.1038/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., Taché, 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 & Double 19, 2011. 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., & Dubrovsky, G., Lo, Y.-K., Hsiang, I., Dunn, J., Liu, W., Tache, Y., & Dubrovsky, G., Lo, Y.-K., Hsiang, I., Dunn, J., Liu, W., Tache, Y., & Dubrovsky, G., Lo, Y.-K., Hsiang, I., Dunn, J., Liu, W., Tache, Y., & Samp; 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 Consortium. 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 Consortium. 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 & Dillity, 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 Consortium. 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 & Doiting 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 Consortium. 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 Consortium. 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 Consortium. 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., Schäuffele, S., Michel, K., & Mazzuoli-Weber, G. (2023). *Ussing chamber experiments for distension evoked secretion in human colon* (Version 1) [Data set]. SPARC Consortium. 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 Consortium. https://doi.org/10.26275/RHDA-NBLC

Dataset Citations

DOI: doi:10.17504/protocols.io.4r9gv96 [Protocol]
Citation: pq Yuan, P.-Q., & TachĀ@, 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 Consortium. 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

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 Consortium. https://doi.org/10.26275/PUZI-XTM3

Dataset Citations

DOI: doi:10.17504/protocols.io.4r9gv96 [Protocol]
Citation: pq Yuan, P.-Q., & TachĀ@, 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.b4qrqvv6 [Protocol] Citation: Immunohistochemistry of porcine enteric neurons v1. (2022). https://doi.org/10.17504/protocols.io.b4qrqvv6

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 Consortium. 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 Consortium. 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 Consortium. 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 Consortium. 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., Haberbusch, M., & Moscato, F. (2023). *MicroCT imaging of the fascicular structure in the porcine right and left cervical vagus nerve* (Version 1) [Data set]. SPARC Consortium. https://doi.org/10.26275/GFWU-PI0P

DOI: doi:10.17504/protocols.io.ewov1qd2ygr2/v1 [Protocol] Citation: Kronsteiner, B., Haberbusch, 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 noninjured and chronically transected urethaneanesthetized 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 Consortium. 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 Consortium. 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 Consortium. https://doi.org/10.26275/D488-Z2Q8

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 Consortium. 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 Consortium. https://doi.org/10.26275/IV1J-X1G4

Dataset Citations

DOI: doi:10.17504/protocols.io.btwinpce [Protocol] Citation: Protocol for & Doi:10.17504/protocols.io.btwinpce [Protocol] Citation: Protocol for & Doi:10.17504/protocols.io.btwinpce | Colon & Colon

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 Consortium. 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 Consortium. 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 Consortium. 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 Consortium. https://doi.org/10.26275/WGLU-JIUD

Dataset Citations

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

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*

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

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 Consortium. https://doi.org/10.26275/7MDX-ASXC

Dataset Citations

DOI: 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 Dataset ID: 29 Dataset Version: 7

Citation: Tappan, S., Heal, M., Leung, C., Chen, J., Cheng, Z., Schwaber, J., Vadigepalli, R., Achanta, S., Robbins, S., Moss, A., Gorky, J., & Nieves, S. (2023). *Molecular phenotype distribution of single rat intracardiac neurons* (Version 7) [Data set]. SPARC Consortium. https://doi.org/10.26275/SP7Z-YLUN

Dataset Citations

DOI: doi: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 [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 [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 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 Consortium. https://doi.org/10.26275/AHQC-LDAR

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

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 Consortium. https://doi.org/10.26275/EEFP-AZAY

Dataset Citations

DOI: doi:10.17504/protocols.io.xpxfmpn [Protocol]
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 [Protocol] 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 [Protocol] 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: 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:10.26275/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). <i>High-throughput segmentation of rat unmyelinated axons by deep learning</i>
(Version 1) [Data set]. SPARC Consortium. https://doi.org/10.26275/K0MX-JCTH