

Resource Summary Report

Generated by [PRECISE-TBI](#) on Sep 8, 2026

SPARC Portal

RRID:SCR_017041

Type: Tool

Proper Citation

SPARC Portal (RRID:SCR_017041)

Resource Information

URL: <https://sparc.science>

Proper Citation: SPARC Portal (RRID:SCR_017041)

Description: SPARC data repository as of 2023 is an open data repository developed as part of the NIH SPARC initiative and has been used by SPARC funded investigator groups to curate and publish high quality datasets related to the autonomic nervous system. We are thrilled that as of August 2022, SPARC is accepting datasets from investigators that are not funded through the NIH SPARC program. The NIH's Common Fund Stimulating Peripheral Activity to Relieve Conditions (SPARC) program aims to transform our understanding of these nerve-organ interactions and ultimately advance neuromodulation field toward precise treatment of diseases and conditions for which conventional therapies fall short.

Abbreviations: SPARC.science

Synonyms: , SPARC Project, SPARC Repository, Stimulating Peripheral Activity to Relieve Conditions

Resource Type: data repository, service resource, storage service resource

Defining Citation: [PMID:34248680](#), [DOI:10.1101/2021.02.10.430563](#)

Keywords: Nervous system, periphery, organ, human, FASEB list, repository, curated

Funding: NIH Office of the Director OD023849;
NIH Office of the Director OD024908;
NIH Office of the Director OD025306;
NIH Office of the Director OD025349;
NIH Office of the Director OD026585;
NIH Office of the Director OD030213;
NIH Office of the Director OD030541;
NIH Office of the Director OD032619

Availability: Free, Freely available,

Resource Name: SPARC Portal

Resource ID: SCR_017041

Alternate IDs: DOI:10.26275, r3d100013719

Alternate URLs: <https://commonfund.nih.gov/sparc>, <https://docs.sparc.science/>, <https://data.sparc.science/>, <https://doi.org/10.26275>, <https://doi.dx/10.26275>, <https://sparc.science/data?type=dataset>, <https://doi.org/10.17616/R31NJN2V>

License: CC-BY license (unless otherwise specified)

License URLs: <https://docs.sparc.science/docs/terms-of-service>

Record Creation Time: 20220129T080333+0000

Record Last Update: 20260905T132817+0000

Ratings and Alerts

No rating or validation information has been found for SPARC Portal.

No alerts have been found for SPARC Portal.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 119 mentions in open access literature.

Listed below are recent publications. The full list is available at [PRECISE-TBI](#) .

Weiler S, et al. (2026) Protocol for minimizing off-target neuronal activation during optical stimulation in vivo. STAR protocols, 7(1), 104342.

Bender SA, et al. (2026) Single-Electrode, Bidirectional Control of Heart Rate via Vagus Nerve Modulation in Rat Model. IEEE transactions on neural systems and rehabilitation engineering : a publication of the IEEE Engineering in Medicine and Biology Society, 34, 1144.

Gupta S, et al. (2025) Biophysical modelling of intrinsic cardiac nervous system neuronal electrophysiology based on single-cell transcriptomics. The Journal of physiology, 603(7), 2119.

Pelot NA, et al. (2025) The human vagal complex: from gross anatomy to single neurons, from brainstem to abdomen. Research square.

Rodrigues AJ, et al. (2025) Effect of Anesthesia and Diurnal Variation on Chronic Vagus Nerve Activity in Rats. *Journal of neuroscience research*, 103(5), e70045.

Upadhye AR, et al. (2025) Phosphotungstic Acid Staining to Visualize the Vagus Nerve Perineurium Using Micro-CT. *Journal of neuroimaging : official journal of the American Society of Neuroimaging*, 35(2), e70040.

Bueckle A, et al. (2025) Construction, Deployment, and Usage of the Human Reference Atlas Knowledge Graph for Linked Open Data. *bioRxiv : the preprint server for biology*.

Fuller-Jackson JP, et al. (2025) A 3D Atlas of Visceral and Somatic Pelvic Motor Neurons in Whole Mounts of Female and Male Rat Spinal Cords. *The Journal of comparative neurology*, 533(11), e70109.

Shiralkar J, et al. (2025) Correction: Neural recordings can differentiate between spontaneously metastasizing melanomas and melanomas with low metastatic potential. *PloS one*, 20(1), e0318831.

Imam FT, et al. (2025) Developing a multiscale neural connectivity knowledgebase of the autonomic nervous system. *Frontiers in neuroinformatics*, 19, 1541184.

Tompkins JD, et al. (2025) Comparative specialization of intrinsic cardiac neurons in humans, mice and pigs. *The Journal of physiology*, 603(7), 2043.

Adeodu O, et al. (2025) Short term hemodynamic effects of atrial fibrillation in a closed-loop human cardiac-baroreflex system. *PloS one*, 20(10), e0334086.

Sorensen L, et al. (2024) Gut Analysis Toolbox - automating quantitative analysis of enteric neurons. *Journal of cell science*, 137(20).

Tompkins JD, et al. (2024) Comparative specialization of intrinsic cardiac neurons in humans, mice, and pigs. *bioRxiv : the preprint server for biology*.

Glass TJ, et al. (2024) Developmental deglutition and intrinsic tongue muscle maturation phenotypes in the Ts65Dn mouse model of Down syndrome. *Frontiers in neurology*, 15, 1461682.

Chang EH, et al. (2024) Bridging complexity through integrative systems neuroscience. *Frontiers in systems biology*, 4, 1487298.

Verma N, et al. (2023) Microneurography as a minimally invasive method to assess target engagement during neuromodulation. *Journal of neural engineering*, 20(2).

M??nzberg H, et al. (2023) Sensory spinal interoceptive pathways and energy balance regulation. *Molecular metabolism*, 78, 101817.

Jaffey DM, et al. (2023) Vagal preganglionic axons arborize in the myenteric plexus into two types: nitrenergic and non-nitrenergic postganglionic motor pools? *American journal of physiology. Regulatory, integrative and comparative physiology*, 324(3), R305.

Blanz SL, et al. (2023) Spatially selective stimulation of the pig vagus nerve to modulate target effect versus side effect. *Journal of neural engineering*, 20(1).