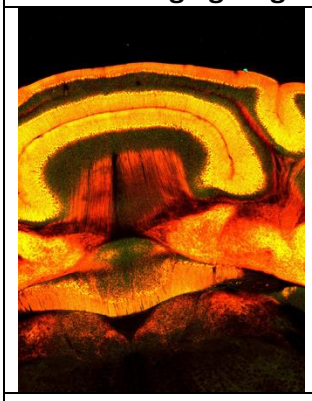
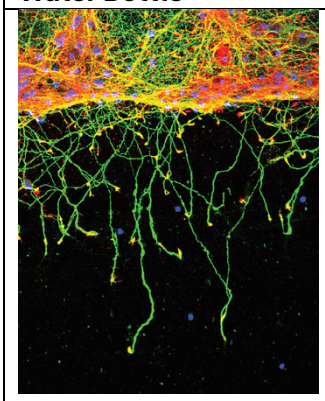
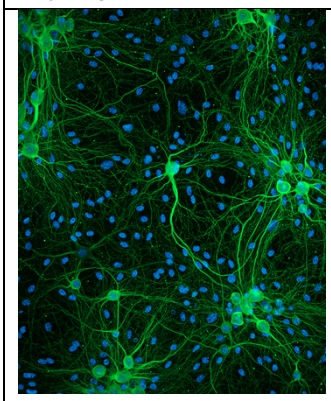
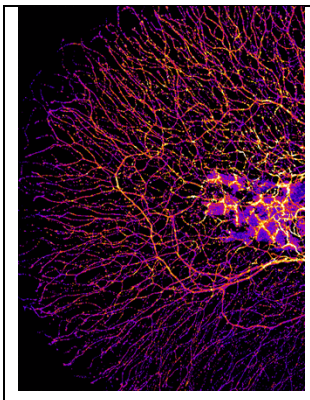
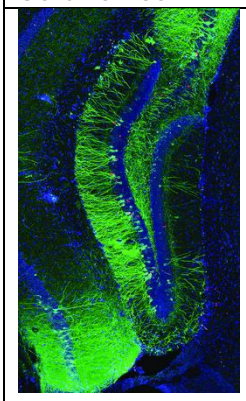
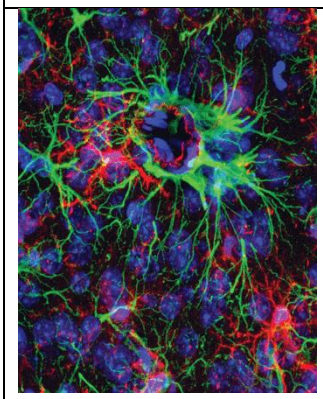
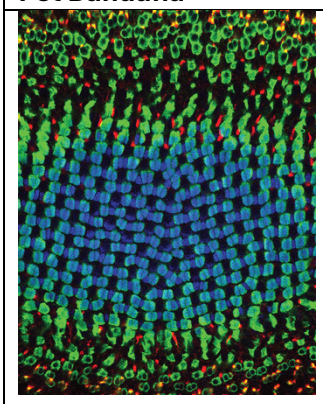
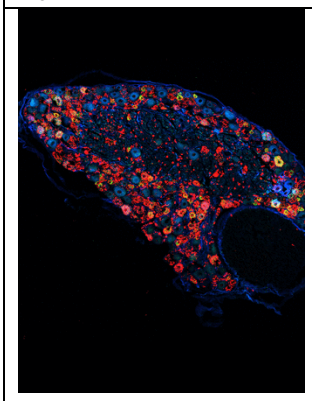
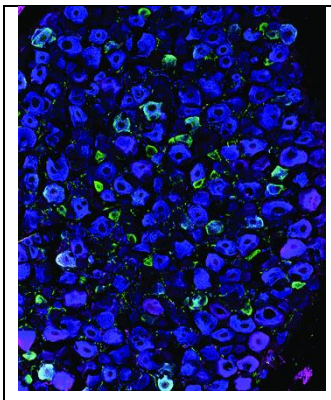
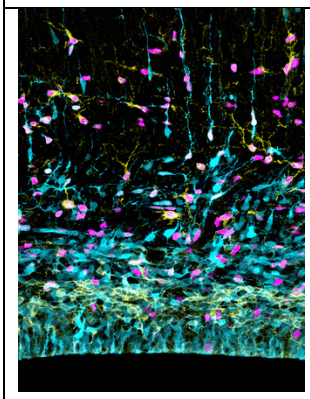
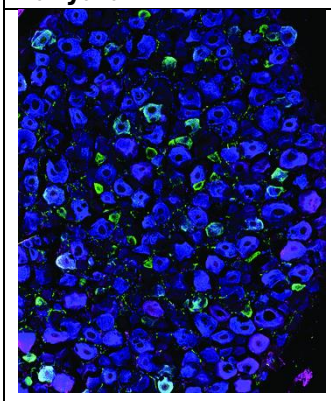
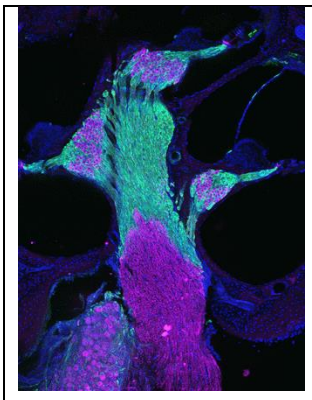
NS24 Science Image Credits

Color Changing Mug	
	Transverse section of the mouse cerebellar vermis with Purkinje cells labeled in red. The cerebellum is largely associated with movement and balance, but see the review by Rudolph et al. Stephanie Rudolph, Aleksandra Badura, Stefano Lutzu, Salil Saurav Pathak, Andreas Thieme, Jessica L. Verpeut, Mark J. Wagner, Yi-Mei Yang and Diasynou Fioravante Journal of Neuroscience 8 November 2023, 43 (45) 7554-7564; https://doi.org/10.1523/JNEUROSCI.1451-23.2023
Water Bottle	
	This image shows neurite outgrowth by cultured mouse neurons 16 hours after a scrape wound was made with a pipette tip. Neurite outgrowth is enhanced by soluble SORLA. Jessica Stupack, Xiao-Peng Xiong, Lu-Lin Jiang, Tongmei Zhang, Lisa Zhou, Alex Campos, Barbara Ranscht, William Mobley, Elena B. Pasquale, Huaxi Xu and Timothy Y. Huang Journal of Neuroscience 29 July 2020, 40 (31) 5908-5921; https://doi.org/10.1523/JNEUROSCI.0723-20.2020
Blanket	
	Pictured are cultured rat hippocampal neurons selectively highlighted by MAP2-immunostaining (green), standing out in comparison to a staining of all cell nuclei by DAPI (blue). Michael Andreyanov et al. used this staining technique to record from hippocampal neurons in their investigation of the role of potassium channel Kv4.2 in gating plasticity in the hippocampus. Michael Andreyanov, Ronit Heinrich and Shai Berlin Journal of Neuroscience 14 February 2024, 44 (7) e2295222023; https://doi.org/10.1523/JNEUROSCI.2295-22.2023
Journal	

	This image shows a Z-projection of all the sensory axon arbors that innervate the skin of a larval zebrafish tail and the differential activation of Src Family Kinases (SFKs) within those axons. Immunostaining for phosphorylated SFK in transgenically-labeled somatosensory axons combined with 3D image analysis allows visualization of different levels of SFK activity within portions of the axon from high levels (white/red/orange) to low levels (purple/blue). Tuttle et al. identify a new role for SFKs in the maintenance of these sensory axons within the skin. Adam M. Tuttle, Matthew B. Pomaville, Katherine C. Delgado, Kevin M. Wright and Alex V. Nechiporuk Journal of Neuroscience 7 September 2022, 42 (36) 6835-6847; https://doi.org/10.1523/JNEUROSCI.0618-22.2022
Scrunchies	
	Pictured is the mouse hippocampus, a brain region containing cells that process memories. The green cells are active during a fearful experience, driving defensive responses and forming a physical representation of a fear memory. The red cells are involved in the recollection of the same memory, and thus cells fluorescing both green and red form a more stable representation of memory. Dorst et al. found that artificially reactivating these cells drives the behavioral expression of fear in a manner that depends on the animal's physical surroundings. Kaitlyn E. Dorst, Ryan A. Senne, Anh H. Diep, Antje R. de Boer, Rebecca L. Suthard, Heloise Leblanc, Evan A. Ruesch, Angela Y. Pyo, Sara Skelton, Lucas C. Carstensen, Samantha Malmberg, Olivia P. McKissick, John H. Bladon and Steve Ramirez Journal of Neuroscience 10 January 2024, 44 (2) e0340232023; https://doi.org/10.1523/JNEUROSCI.0340-23.2023
	This image shows the morphology of mouse glia 24 hours after four serial systemic injections of endotoxin. Circumventricular organs were immunostained for microglia/macrophages (Iba1, red), astrocytes (GFAP, green) and nuclei (DRAQ5, blue). Serial systemic endotoxin injections elicit neuroprotective spinal cord microglia through interleukin-1-dependent cross-talk with endothelial cells. Camila M. Freria, Faith H. Brennan, David R. Sweet, Zhen Guan, Jodie C. Hall, Kristina A. Kigerl, Daniel P. Nemeth, Xiaoyu Liu, Steve Lacroix, Ning Quan and Phillip G. Popovich

	Journal of Neuroscience 18 November 2020, 40 (47) 9103-9120; https://doi.org/10.1523/JNEUROSCI.0131-20.2020
Pet Bandana	
	This image shows the localization of zebrafish apical polarity gene Crb1 (red) in a transverse section of the adult retina. Green is arrestin 3a stain, and blue is DAPI nuclear stain. Unlike mammalian Crb1, zebrafish Crb1 does not localize to the subapical regions of photoreceptors and Müller glial cells; rather, it localizes to a small region of cone outer segments, specifically, the cell membranes surrounding the axonemes. Chuanyu Guo, Ciana Deveau, Cen Zhang, Ralph Nelson and Xiangyun Wei Journal of Neuroscience 9 September 2020, 40 (37) 7065-7079; https://doi.org/10.1523/JNEUROSCI.0497-20.2020
Microfiber Cloths & Lip Balm	
	This stacked confocal image shows a 10-µm thick section through a whole L4 dorsal root ganglion from a mouse. Multiple subpopulations of sensory neurons are labeled: neurofilament 200 (blue) marks myelinated neurons including touch-sensitive Abeta low-threshold mechanoreceptors, and calcitonin gene-related peptide (green) marks peptidergic nociceptors. Overlap in these populations represent myelinated A-delta nociceptors. In addition Kcna6 mRNA, which encodes the Kv1.6 potassium channel subunit is indicated by chromogenic in situ hybridization (red). Kcna6 is highly enriched in nociceptive sensory neuron populations, where Kv1.6 influences thermal and mechanical sensation in acute and neuropathic pain states. Liam J. Peck, Ryan Patel, Paula Diaz, Yolanda M. Wintle, Anthony H. Dickenson, Andrew J. Todd, Margarita Calvo and David L.H. Bennett Journal of Neuroscience 3 November 2021, 41 (44) 9141-9162; https://doi.org/10.1523/JNEUROSCI.0187-21.2021
Post-Its	

	Pictured are overlayed confocal images of mouse dorsal root ganglion neurons (DRGNs) labeled with antibodies against calcium sensor caldendrin (purple), a marker for mechanically sensitive DRGNs (neurofilament 200, blue), and calcitonin gene related peptide parvalbumin (green). This technique revealed that caldendrin is highly expressed in mechanically sensitive DRGNs, similar to mechanically active receptors that play a role in touch sensation (PIEZO2). Josue A. Lopez, Luis O. Romero, Wai-Lin Kaung, J. Wesley Maddox, Valeria Vásquez and Amy Lee Journal of Neuroscience 6 March 2024, 44 (10) e1402232023; https://doi.org/10.1523/JNEUROSCI.1402-23.2023
	Confocal image of neural progenitors and their glial cell progeny in the developing mouse dorsal forebrain. Neural progenitors were coelectroporated in utero with transcription factor ASCL1-expressing constructs that over-activate the Notch signaling pathway (cyan). Notch pathway overactivation promotes the genesis of glial precursor cells, which express OLIG2 (magenta) and PDGFRα (yellow) as they mature. Luuli N. Tran, Sarah K. Loew and Santos J. Franco Journal of Neuroscience 11 October 2023, 43 (41) 6854-6871; https://doi.org/10.1523/JNEUROSCI.0144-23.2023
Lanyard	
	Pictured are overlayed confocal images of mouse dorsal root ganglion neurons (DRGNs) labeled with antibodies against calcium sensor caldendrin (purple), a marker for mechanically sensitive DRGNs (neurofilament 200, blue), and calcitonin gene related peptide parvalbumin (green). This technique revealed that caldendrin is highly expressed in mechanically sensitive DRGNs, similar to mechanically active receptors that play a role in touch sensation (PIEZO2). Josue A. Lopez, Luis O. Romero, Wai-Lin Kaung, J. Wesley Maddox, Valeria Vásquez and Amy Lee Journal of Neuroscience 6 March 2024, 44 (10) e1402232023; https://doi.org/10.1523/JNEUROSCI.1402-23.2023
President's Gift	



This image shows a cross-section of the cochlea within the inner ear of a reporter mouse. P2×7 receptor-expressing satellite glial cells and Schwann cells are labelled with GFP (green) and spiral ganglion neurons are immunolabeled for bIII-tubulin (magenta).

Silvia Prades, Gregory Heard, Jonathan E. Gale, Tobias Engel, Robin Kopp, Annette Nicke, Katie E. Smith and Daniel J. Jagger

Journal of Neuroscience 24 March 2021, 41 (12) 2615-2629; https://doi.org/10.1523/JNEUROSCI.2240-20.2021