

Resource Summary Report

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University of North Carolina at Chapel Hill School of Medicine Neuroscience Microscopy Core Facility

RRID:SCR_019060

Type: Tool

Proper Citation

University of North Carolina at Chapel Hill School of Medicine Neuroscience Microscopy Core Facility (RRID:SCR_019060)

Resource Information

URL: <https://www.med.unc.edu/neuroscience/core-facilities/neuro-microscopy/>

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Description: Microscopy Core for high resolution imaging and aims to make this technology accessible to neuroscientists and other scientific researchers. Provides advanced systems for cellular and molecular imaging of in vitro and in vivo samples, implements new imaging technologies, particularly related to real time and tissue clearing based imaging of neurodevelopment and neural functions, offers training, consultation, data analysis, image processing, and centralized technical expertise.

Abbreviations: NMC

Synonyms: UNC Neuroscience Microscopy Core, University of North Carolina at Chapel Hill UNC Neuroscience Microscopy Core, UNC School of Medicine Neuroscience Microscopy Core Facility

Resource Type: core facility, service resource, access service resource

Keywords: USEdit, microscopy, high resolution imaging, neuroscience microscopy, cellular imaging, molecular imaging, in vitro imaging, in vivo imaging, neurodevelopment, neural function, data analysis, image processing, ABRF, ABRF

Funding: NINDS P30 NS045892;
NICHD U54 HD079124

Availability: Open

Resource Name: University of North Carolina at Chapel Hill School of Medicine Neuroscience Microscopy Core Facility

Resource ID: SCR_019060

Alternate IDs: ABRF_1052

Alternate URLs: <https://coremarketplace.org/?FacilityID=1052>

Record Creation Time: 20220129T080343+0000

Record Last Update: 20260731T043040+0000

Ratings and Alerts

No rating or validation information has been found for University of North Carolina at Chapel Hill School of Medicine Neuroscience Microscopy Core Facility.

No alerts have been found for University of North Carolina at Chapel Hill School of Medicine Neuroscience Microscopy Core Facility.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 57 mentions in open access literature.

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

Glass MR, et al. (2026) Human cortical organoids recapitulate inter-individual variability in infant brain-growth trajectories. *Cell stem cell*, 33(1), 142.

Eaker AR, et al. (2025) Astrocyte-derived PTPRZ1 regulates astrocyte morphology and excitatory synaptogenesis. *bioRxiv : the preprint server for biology*.

Curtis BN, et al. (2025) Lipid packing and local geometry influence septin curvature sensing. *bioRxiv : the preprint server for biology*.

Garcia MM, et al. (2025) Noncanonical short-latency auditory pathway directly activates deep cortical layers. *Nature communications*, 16(1), 5911.

Park J, et al. (2025) Single nucleus RNA sequencing of the cerebral cortex from genetically diverse inbred mouse strains reveals differences in pericyte and endothelial cell composition. *PloS one*, 20(8), e0323827.

Glass MR, et al. (2025) Early cell cycle genes in cortical organoid progenitors predict interindividual variability in infant brain growth trajectories. *bioRxiv : the preprint server for biology*.

Garcia MM, et al. (2025) Noncanonical Short-Latency Auditory Pathway Directly Activates Deep Cortical Layers. *bioRxiv : the preprint server for biology*.

Edwards RJ, et al. (2025) Fusiform Cells in the Dorsal Cochlear Nucleus Change Intrinsic Electrophysiological Properties and Morphologically Remodel Their Basal Dendrites with Age. *bioRxiv* : the preprint server for biology.

Clissold KA, et al. (2025) How do you measure the success and impact of a core facility? *BioTechniques*, 77(7-8), 263.

Higgs MG, et al. (2025) Flagellar motility and the mucus environment influence aggregation-mediated antibiotic tolerance of *Pseudomonas aeruginosa* in chronic lung infection. *mBio*, 16(6), e0083125.

Ma Y, et al. (2025) A Metabolite Co-Delivery Strategy to Improve mRNA Lipid Nanoparticle Delivery. *ACS applied materials & interfaces*, 17(18), 26202.

Tiwade PB, et al. (2025) Customizable Polymeric Nanoparticle Materials Optimized on Hypoxic Cells Facilitate mRNA Expression in the Lungs In Vivo. *Advanced healthcare materials*, 14(17), e2500245.

Landry T, et al. (2025) Targeting glucose-inhibited hippocampal CCK interneurons prevents cognitive impairment in diet-induced obesity. *Neuron*.

Xing L, et al. (2025) A luminescence-based biosensor to measure endogenous UBE3A activity. *iScience*, 28(11), 113684.

Chéry SL, et al. (2025) Neurosteroid (3 α ,5 β)3-hydroxypregnan-20-one enhancement of anti-inflammatory chemokine CX3CL1 exhibits sex, brain region, and cellular specificity in alcohol-preferring rats. *Psychopharmacology*.

Ma Y, et al. (2025) mRNA lipid nanoparticle formulation, characterization and evaluation. *Nature protocols*, 20(9), 2618.

Narasipura EA, et al. (2025) A Chemoinformatic-Guided Synthesis of a Spleen-Expressing mRNA Lipid Nanoparticle Platform. *Bioconjugate chemistry*, 36(1), 54.

Howard SA, et al. (2025) First-in-line subcutaneous injectable for reversible, non-hormonal male contraception. *Drug delivery and translational research*.

Lai D, et al. (2024) SLC35A2 loss of function variants affect glycomic signatures, neuronal fate, and network dynamics. *bioRxiv* : the preprint server for biology.

Williams BN, et al. (2024) Heterogeneity in the progression of retinal pathologies in mice harboring patient mimicking *Impg2* mutations. *Human molecular genetics*, 33(5), 448.