# **Resource Summary Report**

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# University of Pennsylvania Perelman School of Medicine Electron Microscopy Resource Lab Core Facility

RRID:SCR\_022375

Type: Tool

## **Proper Citation**

University of Pennsylvania Perelman School of Medicine Electron Microscopy Resource Lab Core Facility (RRID:SCR 022375)

#### Resource Information

URL: https://www.med.upenn.edu/electronmicroscopyresourcelab/

**Proper Citation:** University of Pennsylvania Perelman School of Medicine Electron Microscopy Resource Lab Core Facility (RRID:SCR\_022375)

**Description:** Training and service facility dedicated to providing both conventional transmission electron microscopy of cells and tissues and state of the art cryo-electron microscopy and cryo-electron tomography for structural investigation of macromolecules and cells.

**Abbreviations: EMRL** 

**Synonyms:** University of Pennsylvania Perelman School of Medicine Electron Microscopy Resource Lab, Electron Microscopy Resource Lab

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

**Keywords:** USEDit, ABRF, conventional transmission electron microscopy, cryo-electron microscopy, cryo-electron tomography

Funding:

Availability: Open

Resource Name: University of Pennsylvania Perelman School of Medicine Electron

Microscopy Resource Lab Core Facility

Resource ID: SCR\_022375

Alternate IDs: ARBF\_1390

Alternate URLs: https://coremarketplace.org?citation=1&FacilityID=1390

**Record Creation Time:** 20220602T050140+0000

**Record Last Update**: 20250519T205323+0000

### **Ratings and Alerts**

No rating or validation information has been found for University of Pennsylvania Perelman School of Medicine Electron Microscopy Resource Lab Core Facility.

No alerts have been found for University of Pennsylvania Perelman School of Medicine Electron Microscopy Resource Lab Core Facility.

#### Data and Source Information

Source: SciCrunch Registry

## Usage and Citation Metrics

We found 23 mentions in open access literature.

**Listed below are recent publications.** The full list is available at NIF.

Yoon IC, et al. (2025) Piperazine-Derived Bisphosphonate-Based Ionizable Lipid Nanoparticles Enhance mRNA Delivery to the Bone Microenvironment. Angewandte Chemie (International ed. in English), 64(3), e202415389.

Padilla MS, et al. (2025) Solution biophysics identifies lipid nanoparticle non-sphericity, polydispersity, and dependence on internal ordering for efficacious mRNA delivery. bioRxiv: the preprint server for biology.

Padilla MS, et al. (2025) Branched endosomal disruptor (BEND) lipids mediate delivery of mRNA and CRISPR-Cas9 ribonucleoprotein complex for hepatic gene editing and T cell engineering. Nature communications, 16(1), 996.

Bristow P, et al. (2024) Aptamer-Targeted Dendrimersomes Assembled from Azido-Modified Janus Dendrimers "Clicked" to DNA. Biomacromolecules, 25(3), 1541.

Fenton AR, et al. (2024) FMRP regulates MFF translation to locally direct mitochondrial fission in neurons. Nature cell biology, 26(12), 2061.

Xu Z, et al. (2024) Cryo-electron microscopy reveals a single domain antibody with a unique binding epitope on fibroblast activation protein alpha. bioRxiv: the preprint server for biology.

Liu X, et al. (2024) Evaluation of a rapid multi-attribute combinatorial high-throughput UV-Vis/DLS/SLS analytical platform for rAAV quantification and characterization. Molecular therapy. Methods & clinical development, 32(3), 101298.

Wenger ES, et al. (2024) Engineering Substrate Channeling in Assembly-Line Terpene Biosynthesis. bioRxiv: the preprint server for biology.

Vrettos N, et al. (2024) MIWI N-terminal arginines orchestrate generation of functional pachytene piRNAs and spermiogenesis. Nucleic acids research, 52(11), 6558.

Cory MB, et al. (2024) The LexA-RecA\* structure reveals a cryptic lock-and-key mechanism for SOS activation. Nature structural & molecular biology, 31(10), 1522.

Kim HJ, et al. (2024) Structure of the Hir histone chaperone complex. Molecular cell, 84(14), 2601.

Palmer NJ, et al. (2024) Mechanisms of actin filament severing and elongation by formins. Nature, 632(8024), 437.

Barrie KR, et al. (2024) Mechanism of actin filament severing and capping by gelsolin. Nature structural & molecular biology.

Connard SS, et al. (2024) Plasma and synovial fluid extracellular vesicles display altered microRNA profiles in horses with naturally occurring post-traumatic osteoarthritis: an exploratory study. Journal of the American Veterinary Medical Association, 262(S1), S83.

Kixmoeller K, et al. (2024) Centromeric chromatin clearings demarcate the site of kinetochore formation. bioRxiv: the preprint server for biology.

Gaynes MN, et al. (2024) Structure of the prenyltransferase in bifunctional copalyl diphosphate synthase from Penicillium fellutanum reveals an open hexamer conformation. Journal of structural biology, 216(1), 108060.

Ren B, et al. (2024) Architecture of the Toxoplasma gondii apical polar ring and its role in gliding motility and invasion. Proceedings of the National Academy of Sciences of the United States of America, 121(46), e2416602121.

van Eeuwen T, et al. (2023) Transition State of Arp2/3 Complex Activation by Actin-Bound Dimeric Nucleation-Promoting Factor. Proceedings of the National Academy of Sciences of the United States of America, 120(33), e2306165120.

Glass BH, et al. (2023) Characterization of a sperm motility signalling pathway in a

gonochoric coral suggests conservation across cnidarian sexual systems. Proceedings. Biological sciences, 290(2004), 20230085.

Shepherd SJ, et al. (2023) Throughput-scalable manufacturing of SARS-CoV-2 mRNA lipid nanoparticle vaccines. Proceedings of the National Academy of Sciences of the United States of America, 120(33), e2303567120.