# Resource Summary Report

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## University of California at Los Angeles California NanoSystems Institute Advanced Light Microscopy and Spectroscopy Core Facility

RRID:SCR_022789
Type: Tool

### Proper Citation

University of California at Los Angeles California NanoSystems Institute Advanced Light Microscopy and Spectroscopy Core Facility (RRID:SCR_022789)

### Resource Information

**URL:** https://alms.cnsi.ucla.edu/become-a-user/

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**Description:** Offers microscopy services, consultation, and support for application of novel microscopic and spectroscopic methods and advanced image analysis techniques for study of macromolecules, cellular dynamics and nano-scale characterization of bio-materials. Provides collection of customized biological fluorescence microscopes and small-animal imaging devices to study biological processes with high spatial and temporal resolution in whole organisms and in living cells down to single molecule detection level with nanometer accuracy. Located in basement and second floor of CNSI building, two optical suites designed to house microscopes with the required environment control (low vibration, air-filtered, air-conditioned and light-tight) and services. Services include Wide-field Fluorescence Imaging Microscopy (on a limited basis), Confocal One-Photon and Two-Photon Laser Scanning Microscopy, (both point scanning and spinning disk), Fluorescence Correlation Spectroscopy (FCS), Fluorescence Resonance Energy Transfer (FRET), microscopic and macroscopic Fluorescence Lifetime Imaging (FLIM) with Time-Correlated-Single-Photon-Counting (TCSPC) and Near-Infrared (NIR) Detection, Stimulated Emission Depletion laser-scanning microscopy (STED) (a super-resolution technique), both microscopic and macroscopic (small animal) spectral unmixing and laser capture microdissection.

**Abbreviations:** ALMS

**Synonyms:** UCLA CNSI Advanced Light Microscopy & Spectroscopy Core, Advanced Light Microscopy & Spectroscopy Core

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

**Keywords:** USEDit, ABRF, Wide-field Fluorescence Imaging Microscopy, Confocal One-Photon and Two-Photon Laser Scanning Microscopy, Fluorescence Correlation Spectroscopy, Fluorescence Resonance Energy Transfer, microscopic and macroscopic Fluorescence Lifetime Imaging, Time-Correlated-Single-Photon-Counting, Near-Infrared Detection, Stimulated Emission Depletion laser-scanning microscopy, microscopic and macroscopic spectral unmixing, laser capture microdissection

**Funding:**

**Resource Name:** University of California at Los Angeles California NanoSystems Institute Advanced Light Microscopy and Spectroscopy Core Facility

**Resource ID:** SCR_022789

**Alternate IDs:** ABRF_1567

**Alternate URLs:** https://coremarketplace.org/?FacilityID=1567&citation=1

**License URLs:** https://alms.cnsi.ucla.edu/policies/

**Record Creation Time:** 20220928T050155+0000

**Record Last Update:** 20250412T060516+0000

## Ratings and Alerts

No rating or validation information has been found for University of California at Los Angeles California NanoSystems Institute Advanced Light Microscopy and Spectroscopy Core Facility.

No alerts have been found for University of California at Los Angeles California NanoSystems Institute Advanced Light Microscopy and Spectroscopy Core Facility.

## Data and Source Information

**Source:** SciCrunch Registry

## Usage and Citation Metrics

We found 8 mentions in open access literature.

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


Valencia DA, et al. (2024) Human formin FHOD3-mediated actin elongation is required for sarcomere integrity in cardiomyocytes. bioRxiv : the preprint server for biology.

Du W, et al. (2024) Myosin II mediates Shh signals to shape dental epithelia via control of cell adhesion and movement. PLoS genetics, 20(6), e1011326.

Kim PH, et al. (2024) Progerin forms an abnormal meshwork and has a dominant-negative effect on the nuclear lamina. Proceedings of the National Academy of Sciences of the United States of America, 121(27), e2406946121.

Kot A, et al. (2024) Loss of the long form of Plod2 phenocopies contractures of Bruck syndrome-osteogenesis imperfecta. Journal of bone and mineral research : the official journal of the American Society for Bone and Mineral Research, 39(9), 1240.

Jeyachandran AV, et al. (2023) Comparative Analysis of Molecular Pathogenic Mechanisms and Antiviral Development Targeting Old and New World Hantaviruses. bioRxiv : the preprint server for biology.

Sadier A, et al. (2023) Bat teeth illuminate the diversification of mammalian tooth classes. Nature communications, 14(1), 4687.

Truong L, et al. (2023) Single-nucleus resolution mapping of the adult C. elegans and its application to elucidate inter- and trans-generational response to alcohol. Cell reports, 42(6), 112535.

Sundari Thooyamani A, et al. (2023) Using Ex Vivo Live Imaging to Investigate Cell Divisions and Movements During Mouse Dental Renewal. Journal of visualized experiments : JoVE(200).