

# Louis Z. Sharp

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## Education

BS in Molecular and Cell Biology, University of California, Berkeley, Berkeley, CA.  
AS in Biotechnology, Peralta Community Colleges, Oakland, CA.

## Laboratory Experience

Gordon Lab, UCSF Parnassus, San Francisco, CA.      SRA 3/Lab Manager, 2018-2020

- Continuation of duties from Fahy Lab with increased focus on individual projects, atac-seq, library prep, CRISPR, and lentivirus gene silencing and upregulation.
- Administrative duties including but not limited to new lab set-up, ordering, stocking, maintaining inventory, interacting with vendors, ensuring EH&S compliance, maintaining CUA/BUA/training for lab members, chemical inventory, budgeting, and training of new hire technicians.

Fahy/Gordon Lab, UCSF Parnassus, San Francisco, CA.      SRA 2, 2014-2018

- Harvesting and processing of epithelial cells from human cadaver tracheas. Cell culture of primary airway epithelial cells and multiple cell lines in flasks, dishes, and air-liquid interface with different media types. Lentivirus production and infection on primary cells and cell lines. Extraction of RNA/DNA/protein/chromatin from clinical and cell culture samples.
- Processing of biospecimens from live human subjects including samples of blood, induced sputum, and epithelial brushings. PBMC isolation and short term culturing/stimulation.
- Supporting work for grants, projects, and publications include bacterial transformation, plasmid prep, lentiviral transfection, CRISPR targeted gene editing, BCA/western blot, ELISAs, Taqman, qPCR, library prep/atac-seq, nuclear and cytoplasmic fraction coimmunoprecipitation, immunofluorescence.

Kajimura Lab, UCSF Parnassus, San Francisco, CA.      SRA 1, 2011-2014

- Conducted research projects, published first author paper October 2012, co-author on Nature paper in November 2013.
- Management of mouse colonies including breeding, weaning, age/weight matching, administering of special diets or drugs via injection, genotyping, and dissections. DNA/RNA extraction/isolation and RT/qPCR of cells, mouse, and human tissues.
- Histology including dissection and preparation of samples, samples dehydration and processing, embedding, frozen and paraffin sectioning of multiple tissue types, and immunofluorescence and H&E staining.
- Other techniques including but not limited to gel electrophoresis, statistical analysis, autoclaving, solution preparation, etc.

Berkeley City College, Berkeley, CA.      TA, 2012 - 2014

- Instructional Aide for Intro to Biology and Microbiology courses.
- Performed behind-the-scenes duties such as making microbiological medias, broths, slants, deeps, etc., operating autoclave, grading exams, notebooks, and other assignments.

## Publications

- Dugger DT, Fung M, Zlock L, Caldera S, **Sharp LZ**, Hays SR, Singer JP, Leard LE, Golden JA, Shah RJ, Kukreja J, Gordon E, Finkbeiner W, Kleinhenz ME, Langelier C, Greenland JR. (2020) Cystic Fibrosis Lung Transplant Recipients Have Suppressed Airway Interferon Responses during *Pseudomonas* Infection. *Cell Rep Med*. 2020 Jul 21;1(4):100055. doi: 10.1016/j.xcrm.2020.100055.
- Bernard O, Lachowicz-Scroggins ME, **Sharp LZ**, Sajuthi S, Seibold M, Gordon ED. (2019) A Novel Mechanism of Gasdermin-Dependent IL-33 Secretion Links the Most Replicated Asthma Associated Genetic Loci: IL33, GSDMB, IL1RL1. *American Journal of Respiratory and Critical Care Medicine* 2019;199:A379. [https://doi.org/10.1164/ajrccm-conference.2019.199.1\\_MeetingAbstracts.A3791](https://doi.org/10.1164/ajrccm-conference.2019.199.1_MeetingAbstracts.A3791)
- Lachowicz-Scroggins ME, Gordon ED, Wesolowska-Andersen A, Jackson ND, MacLeod HJ, **Sharp LZ**, Sun M, Seibold MA, Fahy JV. (2018) Cadherin-26 (CDH26) regulates airway epithelial cell cytoskeletal structure and polarity. *Cell Discov*. 2018 Feb 13;4:7. doi: 10.1038/s41421-017-0006-x. eCollection 2018.
- Gordon ED, Palandra J, Wesolowska-Andersen A, Ringel L, Rios CL, Lachowicz-Scroggins ME, **Sharp LZ**, Everman JL, MacLeod HJ, Lee JW, Mason RJ, Matthay MA, Sheldon RT, Peters MC, Nocka KH, Fahy JV, Seibold MA. (2016) IL1RL1 asthma risk variants regulate airway type 2 inflammation. *JCI Insight*. 2016 Sep 8;1(14):e87871.
- Shinoda K, Ohyama K, Hasegawa Y, Chang HY, Ogura M, Sato A, Hong H, Hosono T, **Sharp LZ**, Scheel DW, Graham M, Ishihama Y, Kajimura S. (2015) Phosphoproteomics Identifies CK2 as a Negative Regulator of Beige Adipocyte Thermogenesis and Energy Expenditure. *Cell Metab*. 2015 Dec 1;22(6):997-1008. doi:10.1016/j.cmet.2015.09.029
- Galmozzi A, Sonne SB, Altshuler-Keylin S, Hasegawa Y, Shinoda K, Luijten IH, Chang JW, **Sharp LZ**, Cravatt BF, Saez E, Kajimura S. (2014) ThermoMouse: an in vivo model to identify modulators of UCP1 expression in brown adipose tissue. *Cell Rep*. Dec 11;9(5):1584-93. doi:10.1016/j.celrep.2014.10.066
- Ohno H, Shinoda K, Ohyama K, **Sharp LZ**, Kajimura S. (2013) EHMT1 controls brown adipose cell fate and thermogenesis through the PRDM16 complex. *Nature* Dec 5; 504(7478):163-7. doi:10.1038/nature12652
- Sharp LZ**, Shinoda K, Ohno H, Scheel DW, Tomoda E, Ruiz L, Hu H, Wang L, Pavlova Z, Gilsanz V, Kajimura S. (2012) Human BAT Possesses Molecular Signatures That Resemble Beige/Brite Cells. *PLoS ONE* 7(11): e49452. doi:10.1371/journal.pone.0049452