Michael Sellers Cuoco

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PhD Student, Bioinformatics and Systems Biology

mcuoco@ucsd.edu | (978) 505-0993 | Salk Institute | La Jolla, California
0000-0003-2163-5120 | mikecuoco | cuoco_michael | michaelcuoco

Research interests

Retrotransposon activity in the developing, healthy, aging, and diseased human brain.

Education

University of California, San Diego — La Jolla, California
PhD in Bioinformatics and Systems Biology (BISB) — In Progress
Advised by Rusty Gage and Eran Mukamel

Trinity College — Hartford, Connecticut
BS in Molecular and Cellular Biology — May 2017
Minor in Models and Data

Honors and Awards

NSF Graduate Research Fellowship — 2022
National Science Foundation (NSF)

Spot Award — 2017
Broad Institute

Beta Beta Beta National Biology Honors Society — 2014
Trinity College

NESCAC Winter All-Academic Team — 2014
Trinity College

Research experience

Research Associate — 2016 – 2020
Broad Institute — Cambridge, Massachusetts
Mentors: Aviv Regev, Benjamin Izar, Pratiksha Thakore, Yaara Oren
Used methods in single-cell RNA-seq and CRISPR screening to investigate the mechanisms of cancer drug resistance.

Undergraduate Researcher — 2014 – 2016
Dana-Farber Cancer Institute — Boston, Massachusetts
Mentors: Matthew Meyerson, Alison Taylor
Used targeted CRISPR-Cas9 approaches to engineer chromosome arm deletion in cancer cell lines.

Undergraduate Researcher — 2013
Trinity College — Hartford, Connecticut
HHMI Science Education Alliance-Phage Hunters Advancing Genomics and Evolutionary Science program. (SEA-PHAGES: seaphages.org)
Isolated and purified bacteriophage species. Sequenced and annotated the bacteriophage's genome

Research: Published

Bi, K., He, M. X., Bakouny, Z., Kanodia, A., Napolitano, S., Wu, J., Grimaldi, G., Braun, D. A., **Cuoco, M. S.**, Mayorga, A., DelloStritto, L., Bouchard, G., Steinharter, J., Tewari, A. K., Vokes, N. I., Shannon, E., Sun, M., Park, J., Chang, S. L., McGregor, B. A., Haq, R., Denize, T., Signoretti, S., Guerriero, J. L., Vigneau, S., Rozenblatt-Rosen, O., Rotem, A., Regev, A., Choueiri, T. K., Allen, E. M. V., "Tumor and immune reprogramming during immunotherapy in advanced renal cell carcinoma." In: *Cancer cell* 39 (5 Mar. 13, 2021). DOI: 10.1016/j.ccell.2021.02.015.

Frangieh, C. J., Melms, J. C., Thakore, P. I., Geiger-Schuller, K. R., Ho, P., Luoma, A. M., Cleary, B., Jerby-Arnon, L., Malu, S., **Cuoco, M. S.**, Zhao, M., Ager, C. R., Rogava, M., Hovey, L., Rotem, A., Bernatchez, C., Wucherpfennig, K. W., Johnson, B. E., Rozenblatt-Rosen, O., Schadendorf, D., Regev, A., Izar, B., "Multimodal pooled Perturb-CITE-seq screens in patient models define mechanisms of cancer immune evasion." In: *Nature genetics* 53 (3 Mar. 2021). DOI: 10.1038/s41588-021-00779-1.

He, M. X., **Cuoco, M. S.**, Crowdis, J., Bosma-Moody, A., Zhang, Z., Bi, K., Kanodia, A., Su, M.-J., Ku, S.-Y., Garcia, M. M., Sweet, A. R., Rodman, C., DelloStritto, L., Silver, R., Steinharter, J., Shah, P., Izar, B., Walk, N. C., Burke, K. P., Bakouny, Z., Tewari, A. K., Liu, D., Camp, S. Y., Vokes, N. I., Salari, K., Park, J., Vigneau, S., Fong, L., Russo, J. W., Yuan, X., Balk, S. P., Beltran, H., Rozenblatt-Rosen, O., Regev, A., Rotem, A., Taplin, M.-E., Allen, E. M. V., "Transcriptional mediators of treatment resistance in lethal prostate cancer." In: *Nature medicine* 27 (3 Mar. 2021). DOI: 10.1038/s41591-021-01244-6.

Jerby-Arnon, L., Neftel, C., Shore, M. E., Weisman, H. R., Mathewson, N. D., McBride, M. J., Haas, B., Izar, B., Volorio, A., Boulay, G., Cironi, L., Richman, A. R., Broye, L. C., Gurski, J. M., Luo, C. C., Mylvaganam, R., Nguyen, L., Mei, S., Melms, J. C., Georgescu, C., Cohen, O., Buendia-Buendia, J. E., Segerstolpe, A., Sud, M., **Cuoco, M. S.**, Labes, D., Gritsch, S., Zollinger, D. R., Ortogero, N., Beechem, J. M., Nielsen, G. P., Chebib, I., Nguyen-Ngoc, T., Montemurro, M., Cote, G. M., Choy, E., Letovanec, I., Cherix, S., Wagle, N., Sorger, P. K., Haynes, A. B., Mullen, J. T., Stamenkovic, I., Rivera, M. N., Kadoch, C., Wucherpfennig, K. W., Rozenblatt-Rosen, O., Suvà, M. L., Riggi, N., Regev, A., "Opposing immune and genetic mechanisms shape oncogenic programs in synovial sarcoma." In: *Nature medicine* 27 (2 Jan. 27, 2021). DOI: 10.1038/s41591-020-01212-6.

Muus, C., Luecken, M. D., Eraslan, G., Sikkema, L., Waghray, A., Heimberg, G., Kobayashi, Y., Vaishnav, E. D., Subramanian, A., Smillie, C., Jagadeesh, K. A., Duong, E. T., Fiskin, E., Triglia, E. T., Ansari, M., Cai, P., Lin, B., Buchanan, J., Chen, S., Shu, J., Haber, A. L., Chung, H., Montoro, D. T., Adams, T., Aliee, H., Allon, S. J., Andrusivova, Z., Angelidis, I., Ashenberg, O., Bassler, K., Bécavin, C., Benhar, I., Bergenstråhle, J., Bergenstråhle, L., Bolt, L., Braun, E., Bui, L. T., Callori, S., Chaffin, M., Chichelnitskiy, E., Chiou, J., Conlon, T. M., **Cuoco, M. S.**, Cuomo, A. S. E., Deprez, M., Duclos, G., Fine, D., Fischer, D. S., Ghazanfar, S., Gillich, A., Giotti, B., Gould, J., Guo, M., Gutierrez, A. J., Habermann, A. C., Harvey, T., He, P., Hou, X., Hu, L., Hu, Y., Jaiswal, A., Ji, L., Jiang, P., Kapellos, T. S., Kuo, C. S., Larsson, L., Leney-Greene, M. A., Lim, K., Litviňuková, M., Ludwig, L. S., Lukassen, S., Luo, W., Maatz, H., Madissoon, E., Mamanova, L., Manakongtreecheep, K., Leroy, S., Mayr, C. H., Mbano, I. M., McAdams, A. M., Nabhan, A. N., Nyquist, S. K., Penland, L., Poirion, O. B., Poli, S., Qi, C., Queen, R., Reichart, D., Rosas, I., Schupp, J. C., Shea, C. V., Shi, X., Sinha, R., Sit, R. V., Slowikowski, K., Slyper, M., Smith, N. P., Sountoulidis, A., Strunz, M., Sullivan, T. B., Sun, D., Talavera-López, C., Tan, P., Tantivit, J., Travaglini, K. J., Tucker, N. R., Vernon, K. A., Wadsworth, M. H., Waldman, J., Wang, X., Xu, K., Yan, W., Zhao, W., Ziegler, C. G. K., "Single-cell meta-analysis of SARS-CoV-2 entry genes across tissues and demographics." In: *Nature medicine* 27 (3 Mar. 2021). DOI: 10.1038/s41591-020-01227-z.

Oren, Y., Tsabar, M., **Cuoco, M. S.**, Amir-Zilberstein, L., Cabanos, H. F., Hütter, J.-C., Hu, B., Thakore, P. I., Tabaka, M., Fulco, C. P., Colgan, W., Cuevas, B. M., Hurvitz, S. A., Slamon, D. J., Deik, A., Pierce, K. A., Clish, C., Hata, A. N., Zaganjor, E., Lahav, G., Politi, K., Brugge, J. S., Regev, A., "Cycling cancer persister cells arise from lineages with distinct programs." In: *Nature* 596 (7873 Aug. 13, 2021). DOI: 10.1038/s41586-021-03796-6.

Pelka, K., Hofree, M., Chen, J. H., Sarkizova, S., Pirl, J. D., Jorgji, V., Bejnood, A., Dionne, D., Ge, W. H., Xu, K. H., Chao, S. X., Zollinger, D. R., Lieb, D. J., Reeves, J. W., Fuhrman, C. A., Hoang, M. L., Delorey, T., Nguyen, L. T., Waldman, J., Klapholz, M., Wakiro, I., Cohen, O., Albers, J., Smillie, C. S., **Cuoco, M. S.**, Wu, J., Su, M.-J., Yeung, J., Vijaykumar, B., Magnuson, A. M., Asinovski, N., Moll, T., Goder-Reiser, M. N., Applebaum, A. S., Brais, L. K., DelloStritto, L. K., Denning, S. L., Phillips, S. T., Hill, E. K., Meehan, J. K., Frederick, D. T., Sharova, T., Kanodia, A., Todres, E. Z., Jané-Valbuena, J., Biton, M., Izar, B., Lambden, C. D., Clancy, T. E., Bleday, R., Melnitchouk, N., Irani, J., Kunitake, H., Berger, D. L., Srivastava, A., Hornick, J. L., Ogino, S., Rotem, A., Vigneau, S., Johnson, B. E., Corcoran, R. B., Sharpe, A. H., Kuchroo, V. K., Ng, K., Giannakis, M., Nieman, L. T., Boland, G. M., Aguirre, A. J., Anderson, A. C., Rozenblatt-Rosen, O., Regev, A., Hacohen, N., "Spatially organized multicellular immune hubs in human colorectal cancer." In: *Cell* 184 (18 Aug. 28, 2021). DOI: 10.1016/j.cell.2021.08.003.

Raundhal, M., Ghosh, S., Myers, S. A., **Cuoco, M. S.**, Singer, M., Carr, S. A., Waikar, S. S., Bonventre, J. V., Ritz, J., Stone, R. M., Steensma, D. P., Regev, A., Glimcher, L. H., "Blockade of IL-22 signaling reverses erythroid dysfunction in stress-induced anemias." In: *Nature immunology* 22 (4 Mar. 24, 2021). DOI: 10.1038/s41590-021-00895-4.

Schenkel, J. M., Herbst, R. H., Canner, D., Li, A., Hillman, M., Shanahan, S.-L., Gibbons, G., Smith, O. C., Kim, J. Y., Westcott, P., Hwang, W. L., Freed-Pastor, W. A., Eng, G., **Cuoco, M. S.**, Rogers, P., Park, J. K., Burger, M. L., Rozenblatt-Rosen, O., Cong, L., Pauken, K. E., Regev, A., Jacks, T., "Conventional type I dendritic cells maintain a reservoir of proliferative tumor-antigen specific TCF-1+ CD8+ T cells in tumor-draining lymph nodes." In: *Immunity* 54 (10 Sept. 18, 2021). DOI: 10.1016/j.immuni.2021.08.026.

Drokhlyansky, E., Smillie, C. S., Wittenberghe, N. V., Ericsson, M., Griffin, G. K., Eraslan, G., Dionne, D., **Cuoco, M. S.**, Goder-Reiser, M. N., Sharova, T., Kuksenko, O., Aguirre, A. J., Boland, G. M., Graham, D., Rozenblatt-Rosen, O., Xavier, R. J., Regev, A., "The Human and Mouse Enteric Nervous System at Single-Cell Resolution." In: *Cell* 182 (6 Sept. 2020). DOI: 10.1016/j.cell.2020.08.003.

Izar, B., Tirosh, I., Stover, E. H., Wakiro, I., **Cuoco, M. S.**, Alter, I., Rodman, C., Leeson, R., Su, M.-J., Shah, P., Iwanicki, M., Walker, S. R., Kanodia, A., Melms, J. C., Mei, S., Lin, J.-R., Porter, C. B. M., Slyper, M., Waldman, J., Jerby-Arnon, L., Ashenberg, O., Brinker, T. J., Mills, C., Rogava, M., Vigneau, S., Sorger, P. K., Garraway, L. A., Konstantinopoulos, P. A., Liu, J. F., Matulonis, U., Johnson, B. E., Rozenblatt-Rosen, O., Rotem, A., Regev, A., "A single-cell landscape of high-grade serous ovarian cancer." In: *Nature medicine* 26 (8 June 24, 2020). DOI: 10.1038/s41591-020-0926-0.

Kinker, G. S., Greenwald, A. C., Tal, R., Orlova, Z., **Cuoco, M. S.**, McFarland, J. M., Warren, A., Rodman, C., Roth, J. A., Bender, S. A., Kumar, B., Rocco, J. W., Fernandes, P. A. C. M., Mader, C. C., Keren-Shaul, H., Plotnikov, A., Barr, H., Tsherniak, A., Rozenblatt-Rosen, O., Krizhanovsky, V., Puram, S. V., Regev, A., Tirosh, I., "Pan-cancer single-cell RNA-seq identifies recurring programs of cellular heterogeneity." In: *Nature genetics* 52 (11 Nov. 2020). DOI: 10.1038/s41588-020-00726-6.

Mao, P., Cohen, O., Kowalski, K. J., Kusiel, J. G., Buendia-Buendia, J. E., **Cuoco, M. S.**, Exman, P., Wander, S. A., Waks, A. G., Nayar, U., Chung, J., Freeman, S., Rozenblatt-Rosen, O., Miller, V. A., Piccioni, F., Root, D. E., Regev, A., Winer, E. P., Lin, N. U., Wagle, N., "Acquired FGFR and FGF Alterations Confer Resistance to Estrogen Receptor (ER) Targeted Therapy in ER+ Metastatic Breast Cancer." In: *Clinical cancer research* 26 (22 July 30, 2020). DOI: 10.1158/1078-0432.CCR-19-3958.

Li, A., Herbst, R. H., Canner, D., Schenkel, J. M., Smith, O. C., Kim, J. Y., Hillman, M., Bhutkar, A., **Cuoco, M. S.**, Rappazzo, C. G., Rogers, P., Dang, C., Jerby-Arnon, L., Rozenblatt-Rosen, O., Cong, L., Birnbaum, M., Regev, A., Jacks, T., "IL-33 Signaling Alters Regulatory T Cell Diversity in Support of Tumor Development." In: *Cell reports* 29 (10 Dec. 2019). DOI: 10.1016/j.celrep.2019.10.120.

Jerby-Arnon, L., Shah, P., **Cuoco, M. S.**, Rodman, C., Su, M.-J., Melms, J. C., Leeson, R., Kanodia, A., Mei, S., Lin, J.-R., Wang, S., Rabasha, B., Liu, D., Zhang, G., Margolais, C., Ashenberg, O., Ott, P. A., Buchbinder, E. I., Haq, R., Hodi, F. S., Boland, G. M., Sullivan, R. J., Frederick, D. T., Miao, B., Moll, T., Flaherty, K. T., Herlyn, M., Jenkins, R. W., Thummalapalli, R., Kowalczyk, M. S., Cañadas, I., Schilling, B., Cartwright, A. N. R., Luoma, A. M., Malu, S., Hwu, P., Bernatchez, C., Forget, M.-A., Barbie, D. A., Shalek, A. K., Tirosh, I., Sorger, P. K., Wucherpfennig, K., Allen, E. M. V., Schadendorf, D., Johnson,

B. E., Rotem, A., Rozenblatt-Rosen, O., Garraway, L. A., Yoon, C. H., Izar, B., Regev, A., "A Cancer Cell Program Promotes T Cell Exclusion and Resistance to Checkpoint Blockade." In: *Cell* 175 (4 Nov. 2018). DOI: 10.1016/j.cell.2018.09.006.

Nayar, U., Cohen, O., Kapstad, C., **Cuoco, M. S.**, Waks, A. G., Wander, S. A., Painter, C., Freeman, S., Persky, N. S., Marini, L., Helvie, K., Oliver, N., Rozenblatt-Rosen, O., Ma, C. X., Regev, A., Winer, E. P., Lin, N. U., Wagle, N., "Acquired HER2 mutations in ER+ metastatic breast cancer confer resistance to estrogen receptor-directed therapies." In: *Nature genetics* 51 (2 Dec. 12, 2018). DOI: 10.1038/s41588-018-0287-5.

Wallrapp, A., Riesenfeld, S. J., Burkett, P. R., Abdulnour, R.-E. E., Nyman, J., Dionne, D., Hofree, M., **Cuoco, M. S.**, Rodman, C., Farouq, D., Haas, B. J., Tickle, T. L., Trombetta, J. J., Baral, P., Klose, C. S. N., Mahlakõiv, T., Artis, D., Rozenblatt-Rosen, O., Chiu, I. M., Levy, B. D., Kowalczyk, M. S., Regev, A., Kuchroo, V. K., "The neuropeptide NMU amplifies ILC2-driven allergic lung inflammation." In: *Nature* 549 (7672 Sept. 14, 2017). DOI: 10.1038/nature24029.

Pope, W. H., Bowman, C. A., Russell, D. A., Jacobs-Sera, D., Asai, D. J., Cresawn, S. G., Jacobs, W. R., Hendrix, R. W., Lawrence, J. G., Hatfull, G. F., "Whole genome comparison of a large collection of mycobacteriophages reveals a continuum of phage genetic diversity." In: *eLife* 4 (Apr. 29, 2015). DOI: 10.7554/eLife.06416.

Research: Preprint

Eraslan, G., Drokhlyansky, E., Anand, S., Subramanian, A., Fiskin, E., Slyper, M., Wang, J., Van Wittenberghe, N., Rouhana, J. M., Waldman, J., Ashenberg, O., Dionne, D., Win, T. S., **Cuoco, M. S.**, Kuksenko, O., Branton, P. A., Marshall, J. L., Greka, A., Getz, G., Segre, A. V., Aguet, F., Rozenblatt-Rosen, O., Ardlie, K. G., Regev, A., "Single-nucleus cross-tissue molecular reference maps to decipher disease gene function". In: *BioRxiv* (2021). DOI: 10.1101/2021.07.19.452954.

Pelka, K., Hofree, M., Chen, J., Sarkizova, S., Pirl, J. D., Jorgji, V., Bejnood, A., Dionne, D., Ge, W. H., Xu, K. H., Chao, S. X., Zollinger, D. R., Lieb, D. J., Reeves, J. W., Fuhrman, C. A., Hoang, M. L., Delorey, T., Nguyen, L. T., Waldman, J., Klapholz, M., Wakiro, I., Cohen, O., Smillie, C. S., **Cuoco, M. S.**, Wu, J., Su, M.-j., Yeung, J., Vijaykumar, B., Magnuson, A. M., Asinovski, N., Moll, T., Goder-Reiser, M. N., Applebaum, A. S., Brais, L. K., DelloStritto, L. K., Denning, S. L., Phillips, S. T., Hill, E. K., Meehan, J. K., Frederick, D. T., Sharova, T., Kanodia, A., Todres, E. Z., J, "Multicellular immune hubs and their organization in MMRd and MMRp colorectal cancer". In: *BioRxiv* (2021). DOI: 10.1101/2021.01.30.426796.

Subramanian, A., Vernon, K., Zhou, Y., Marshall, J., Alimova, M., Zhang, F., Slyper, M., Waldman, J., Montesinos, M., Dionne, D., Nguyen, L., **Cuoco, M. S.**, Dubinsky, D., Purnell, J., Keller, K., Turner, S. H., Grinkevich, E., Ghoshal, A., Weins, A., Villani, A.-C., Chang, S., Rosenblatt-Rosen, O., Shaw, J. L., Regev, A., Greka, A., "Obesity-instructed TREM2high macrophages identified by comparative analysis of diabetic mouse and human kidney at single cell resolution". In: *BioRxiv* (2021). DOI: 10.1101/2021.05.30.446342.

Frangieh, C. J., Melms, J. C., Thakore, P. I., Geiger-Schuller, K. R., Ho, P., Luoma, A. M., Cleary, B. R., Malu, S., **Cuoco, M. S.**, Zhao, M., Rogava, M., Hovey, L., Rotem, A., Bernatchez, C., Wucherpfennig, K. W., Johnson, B. E., Rozenblatt-Rosen, O., Schadendorf, D., Regev, A., Izar, B., "Multi-modal pooled Perturb-CITE-Seq screens in patient models define novel mechanisms of cancer immune evasion". In: *BioRxiv* (2020). DOI: 10.1101/2020.09.01.267211.

He, M. X., **Cuoco, M. S.**, Crowdis, J., Bosma-Moody, A., Zhang, Z., Bi, K., Kanodia, A., Su, M.-J., Rodman, C., DelloStritto, L., Shah, P., Burke, K. P., Izar, B., Bakouny, Z., Tewari, A. K., Liu, D., Camp, S. Y., Vokes, N. I., Park, J., Vigneau, S., Fong, L., Rozenblatt-Rosen, O., Regev, A., Rotem, A., Taplin, M.-E., Van Allen, E. M., "Transcriptional mediators of treatment resistance in lethal prostate cancer". In: *BioRxiv* (2020). DOI: 10.1101/2020.03.19.998450.

Hwang, W. L., Jagadeesh, K. A., Guo, J. A., Hoffman, H. I., Yadollahpour, P., Mohan, R., Drokhlyansky, E., Van Wittenberghe, N., Ashenberg, O., Farhi, S., Schapiro, D., Reeves, J. W., Zollinger, D. R., Eng, G., Schenkel, J. M., Freed-Pastor, W. A., Rodrigues, C., Gould, J., Lambden, C., Porter, C., Tsankov, A., Dionne, D., Abbondanza, D., Waldman, J., **Cuoco, M. S.**, Nguyen, L., Delorey, T., Phillips, D., Ciprani, D., Kern, M., Mehta, A., Fuhrman, K., Fropf, R., Beechem, J. M., Loeffler, J. S., Ryan, D. P., Weekes, C. D., Ting, D. T., Ferrone, C. R., Wo, J. Y., Hong, T. S., Aguirre, A. J., Rozen, "Single-nucleus and spatial transcriptomics

of archival pancreatic cancer reveals multi-compartment reprogramming after neoadjuvant treatment". In: *BioRxiv* (2020). DOI: 10.1101/2020.08.25.267336.

Muus, C., Luecken, M. D., Eraslan, G., Waghray, A., Heimberg, G., Sikkema, L., Kobayashi, Y., Vaishnav, E. D., Subramanian, A., Smillie, C., Jagadeesh, K., Duong, E. T., Fiskin, E., Torlai Triglia, E., Becavin, C., Ansari, M., Cai, P., Lin, B., Buchanan, J., Chen, S., Shu, J., Haber, A. L., Chung, H., Montoro, D. T., Adams, T., Aliee, H., Allon, S. J., Andrusivova, Z., Angelidis, I., Ashenberg, O., Bassler, K., Becavin, C., Benhar, I., Bergenstrahle, J., Bergenstrahle, L., Bolt, L., Braun, E., Bui, L. T., Chaffin, M., Chichelnitskiy, E., Chiou, J., Conlon, T. M., **Cuoco, M. S.**, Deprez, M., Fisc, "Integrated analyses of single-cell atlases reveal age, gender, and smoking status associations with cell type-specific expression of mediators of SARS-CoV-2 viral entry and highlights inflammatory programs in putative target cells". In: *BioRxiv* (2020). DOI: 10.1101/2020.04.19.049254.

Oren, Y., Tsabar, M., Cabanos, H. F., **Cuoco, M. S.**, Zaganjor, E., Thakore, P. I., Tabaka, M., Fulco, C. P., Hurvitz, S. A., Slamon, D. J., Lahav, G., Hata, A., Brugge, J. S., Regev, A., "Cycling cancer persister cells arise from lineages with distinct transcriptional and metabolic programs". In: *BioRxiv* (2020). DOI: 10.1101/2020.06.05.136358.

Subramanian, A., Vernon, K., Slyper, M., Waldman, J., Luecken, M. D., Gosik, K., Dubinsky, D., **Cuoco, M. S.**, Keller, K., Purnell, J., Nguyen, L., Dionne, D., Rozenblatt-Rosen, O., Weins, A., Network, H. C. A. L. B., Regev, A., Greka, A., "RAAS blockade, kidney disease, and expression of ACE2, the entry receptor for SARS-CoV-2, in kidney epithelial and endothelial cells". In: *BioRxiv* (2020). DOI: 10.1101/2020.06.23.167098.

Drokhlyansky, E., Smillie, C. S., Van Wittenberghe, N., Ericsson, M., Griffin, G. K., Dionne, D., **Cuoco, M. S.**, Goder-Reiser, M. N., Sharova, T., Aguirre, A. J., Boland, G. M., Graham, D., Rozenblatt-Rosen, O., Xavier, R. J., Regev, A., "The enteric nervous system of the human and mouse colon at a single-cell resolution". In: *BioRxiv* (2019). DOI: 10.1101/746743.

Jerby, L., Neftel, C., Shore, M. E., McBride, M. J., Haas, B., Izar, B., Weissman, H. R., Volorio, A., Boulay, G., Cironi, L., Richman, A. R., Broye, L. C., Gurski, J. M., Luo, C. C., Mylvaganam, R., Nguyen, L., Mei, S., Melms, J., Georgescu, C., Cohen, O., Buendia-Buendia, J. E., **Cuoco, M. S.**, Labes, D., Zollinger, D. R., Beechem, J. M., Nielsen, P., Chebib, I., Cote, G., Choy, E., Letovanec, I., Cherix, S., Wagle, N., Sorger, P. K., Haynes, A. B., Mullen, J. T., Stamenkovic, I., Rivera, M. N., Kadoch, C., Rozenblatt-Rosen, O., Suva, M. L., Riggi, N., Regev, A., "Opposing immune and genetic forces shape oncogenic programs in synovial sarcoma". In: *BioRxiv* (2019). DOI: 10.1101/724302.

Kinker, G. S., Greenwald, A. C., Tal, R., Orlova, Z., **Cuoco, M. S.**, McFarland, J. M., Warren, A., Rodman, C., Roth, J. A., Bender, S. A., Kumar, B., Rocco, J. W., Fernandes, P. A., Mader, C. C., Keren-Shaul, H., Plotnikov, A., Barr, H., Tsherniak, A., Rozenblatt-Rosen, O., Krizhanovsky, V., Puram, S. V., Regev, A., Tirosh, I., "Pan-cancer single cell RNA-seq uncovers recurring programs of cellular heterogeneity". In: *BioRxiv* (2019). DOI: 10.1101/807552.

Li, A., Herbst, R. H., Canner, D., Schenkel, J. M., Smith, O. C., Kim, J. Y., Hillman, M., Bhutkar, A., **Cuoco, M. S.**, Rappazzo, C. G., Rogers, P., Dang, C. Q., Rozenblatt-Rosen, O., Cong, L., Birnbaum, M., Regev, A., Jacks, T., "Longitudinal single cell profiling of regulatory T cells identifies IL-33 as a driver of tumor immunosuppression". In: *BioRxiv* (2019). DOI: 10.1101/512905.

Mao, P., Cohen, O., Kowalski, K. J., Kusiel, J. G., Buendia-Buendia, J. E., **Cuoco, M. S.**, Exman, P., Wander, S. A., Waks, A. G., Nayar, U., Chung, J., Freeman, S., Rozenblatt-Rosen, O., Miller, V. A., Federica Piccioni, F., Root, D. E., Regev, A., Winer, E. P., Lin, N. U., Wagle, N., "Acquired FGFR and FGF alterations confer resistance to estrogen receptor (ER) targeted therapy in ER+ metastatic breast cancer". In: *BioRxiv* (2019). DOI: 10.1101/605436.

Teaching experience

Bootcamp instructor Fall 2021, Fall 2022
Bioinformatics and Systems Biology, UCSD La Jolla, California

Teaching assistant Spring 2015
Department of Biology, Trinity College Hartford, Connecticut
BIOL 224: Genetics

Tutor 2014-2016
Department of Biology, Trinity College Hartford, Connecticut
BIOL 182: Evolution of Life
BIOL 183: Cellular Basis of Life
BIOL 224: Genetics

Skills

Programming
Proficient in: R, LaTeX, Bash.
Familiar with: Python, Google Cloud Platform.

Service and Outreach

Diversity and Science Lecture Series (DASL) La Jolla, California

Seminar Organizer 2021 - Present
Symposium Organizer Fall 2021
Organized and led 3-day symposium focused on issues of diversity, equity and inclusion in STEM

Biology Undergraduate and Master's Mentorship Program (BUMMP) La Jolla, California
Mentor 2021 - Present
Meet with undergraduate students twice quarterly to review

Graduate Bioinformatics Council (GBIC) La Jolla, California
Director of Onboarding 2021 - Present
Led onboarding of new cohorts to Bioinformatics and Systems Biology graduate program
Symposium Organizer 2022