

AVIV REGEV
Curriculum Vitae

Education and training

Ph.D., Computational Biology, Tel Aviv University, Tel Aviv, Israel, 1998-2002

Advisor: Prof. Eva Jablonka (Tel Aviv University)

Advisor: Prof. Ehud Shapiro (Computer Science, Weizmann Institute)

M.Sc. (direct, *Summa cum laude*) Tel Aviv University, Tel Aviv, Israel, 1992-1997

Advisor: Prof. Sara Lavi

A student in the *Adi Lautman Interdisciplinary Program for the Fostering of Excellence* (studies mostly in Biology, Computer Science and Mathematics)

Post Training Positions

Executive Vice President and Global Head, Genentech Research and Early Development, Genentech/Roche, 2020 - Current

HHMI Investigator, 2014-2020

Chair of the Faculty (Executive Leadership Team), Broad Institute, 2015 – 2020

Professor, Department of Biology, MIT, 2015-Current (on leave)

Founding Director, Klarman Cell Observatory, Broad Institute, 2012-2020

Director, Cell Circuits Program, Broad Institute, 2013 - 2020

Associate Professor with Tenure, Department of Biology, MIT, 2011-2015

Early Career Scientist, Howard Hughes Medical Institute, 2009-2014

Core Member, Broad Institute of MIT and Harvard, 2006-Current (on leave)

Assistant Professor, Department of Biology, MIT, 2006-2011

Bauer Fellow, Center for Genomics Research, Harvard University, 2003-2006

International Service

Founding Co-Chair, Human Cell Atlas, 2016-Current

Honors

Vanderbilt Prize, 2021

AACR Academy, Elected Fellow, 2021

AACR-Irving Weinstein Foundation Distinguished Lecturer, 2021

James Prize in Science and Technology Integration, National Academy of Sciences, 2021

National Academy of Medicine USA, Elected Member, 2020

Keio Medical Science Prize, 2020

Helmholtz International Fellow, 2020

Lurie Prize in Biomedical Sciences, 2020

Jonathan Kraft Prize, Massachusetts General Hospital, 2020

Mendel Award, European Society of Human Genetics, 2020

National Academy of Sciences, Elected Member, 2019

FASEB Excellence in Science Mid-Career Investigator Award, 2019

McCormick Lecture, Stanford University, 2018

Harvey Lecture, Harvey Society, New York, 2018
Whetherall Lecture, Oxford, UK, 2018
Paul Marks Prize, Memorial Sloan Kettering Cancer Center, 2017
Innovator Award, International Society for Computational Biology (ISCB), 2017
International Society of Computational Biology (ISCB) Fellow, 2016
Earl and Thressa Stadtman Scholar Award, American Society for Biochemistry and Molecular Biology (ASBMB), 2014
Finalist, Vilcek Prize for Biomedical Promise, Vilcek Foundation, 2009
Overton Prize, International Society for Computational Biology, 2008
PIONEER Award, NIH Director, 2008
Sloan Fellow, Sloan Foundation, 2008
Tomorrow's PIs, Genome Technology Magazine, 2008
Career Award at the Scientific Interface, Burroughs-Wellcome Fund, 2006

Postdoctoral Researchers Supervised

Nachman, Iftach, Merck Fellow, 2004 - 2009, Associate Professor (tenured), Tel Aviv University
Styczynski, Mark, NIH NSRA Fellow, 2007 – 2009, Associate Professor (tenured), Georgia Tech
Gat-Viks, Irit, EMBO and HFSP Fellow, 2008 –2011: Associate Professor (tenured), Tel Aviv University
Amit, Ido, HFSP Fellow, 2007 - 2011: Professor (tenured), Weizmann Institute of Science
Thomas, Elizabeth, 2004 – 2009, Assistant Professor, Northwestern University
Goren, Alon, EMBO Fellow, Hood Fellow, 2008 – 2014, Assistant Professor, University of California, San Diego
Konieczka, Jay, NIH NRSA Fellow, 2008 – 2013, Founder and Chief Operating Officer, enEvolv Corp.
Roy, Sushmita, CIF Fellow, 2010 – 2011, Associate Professor (tenured), University of Wisconsin, Madison
Shay, Tal, 2009 – 2013, Senior Lecturer (tenure-track), Ben Gurion University, Israel
Artomov, Max, 2010 – 2012, Associate Professor (tenured), Washington University
Pochet, Natalie 2010-2012, Assistant Professor, Harvard Medical School
Yosef, Nir, 2010 – 2013, Assistant Professor, University of California, Berkeley
Ye, Jimmie, 2010 – 2014, Assistant Professor, UCSF
Satija, Rahul, NIH NRSA Fellow, 2011-2014, Associate Professor (tenured), NYU/NYGC
Savova, Virginia, 2011-2012, Principal Senior Scientist, Sanofi
Matsui, Toshiyuki, HFSP Fellow 2011 – 2014, Senior Scientist, Astellas Pharmaceuticals, Japan
Schwartz, Schragi, Rothschild and HFSP Fellow, 2011 – 2015; Senior Lecturer (tenure-track), Weizmann Institute of Science, Israel
Ford, Christopher, Helen Hay Whitney Fellow, 2013 – 2015; Senior Scientist, Seres Pharmaceuticals
Katz, Yarden, 2014 – 2015; Systems Biology Fellow, Harvard Medical School
Cheng, Christine, NIH NRSA Fellow, 2011 – 2016; Assistant Professor, Boston University

Jovanovic, Marko, SNF and Marie Curie Fellow, 2011 – 2016; Assistant Professor, Columbia University

Basu, Anindita, 2011 – 2016; Assistant Professor, University of Chicago, Assistant Scientist, Argonne National Laboratory

Bochkis, Irina, K08 Fellow, 2011-2014, Assistant Professor, University of Virginia

Tirosh, Itay, HFSP Fellow, 2012 – 2017; Senior Lecturer (tenure-track), Weizmann Institute of Science

Kowalczyk, Monika, EMBO, ESH Fellow, 2012 – 2017; Associate Director, Systems Biology, Decibel Therapeutics

Ji, Zhe, 2012-2017; Assistant Professor, Northwestern University

Habib, Naomi, Helen Hay Whitney Fellow, 2012-2018; Senior Lecturer (tenure-track); Hebrew University, Israel

Riesefeld, Samantha, NRSA Fellow, 2013 – 2019; Assistant professor, University of Chicago

Singer, Meromit, 2013 – 2018; Assistant professor, Dana-Farber Cancer Institute/Harvard Medical School

de Boer, Carl, CIHR fellow, K99 Fellow, 2014 – 2019; Assistant professor, University of British Columbia

Parnas, Oren, 2014 – 2017; Senior Lecturer (tenure-track), Hebrew University

Cong, Le, CRI fellow, 2014 – 2018; Assistant professor, Stanford University

Boyd, Nick, 2018-2019; Head of Computer Science, XGenomes

Biton, Moshe, HFSP Fellow, 2014 – 2019; Senior Lecturer (tenure-track), Weizmann Institute

Shekhar, Karthik, K99 Fellow, 2015 – 2019; Assistant professor, University of California, Berkeley

Gaublomme, Jellert, 2015 – 2019; Assistant professor, Columbia University

Haber, Adam, 2015 – 2019; Assistant professor, Harvard School of Public Health

Drokhlyansky, Eugene, 2016 – 2019; Senior Scientist, Bristol Myers Squibb, Cambridge, MA.

Tabaka, Marcin, 2014 - 2019; Assistant professor, University of Warsaw, Poland

Xu, Heping, 2016 – 2019; Assistant professor, Westlake Institute, China

Schiebinger, Geoffrey, 2016-2019; Assistant professor, University of British Columbia

Li, Bo, 2017 – 2019; Assistant professor, Mass General Hospital, Harvard Medical School

Weinstein, Joshua, 2012-2019; Assistant professor, University of Chicago

Smillie, Chris, 2016 – 2020; Assistant professor, MGH, Harvard Medical School

Jerby, Livnat, CRI Fellow, 2015 – 2020; Assistant professor, Stanford University

Ouspenskaia, Tamara, Lymphoma and Leukemia Society Fellow, 2016 – 2020; Senior Scientist, Flagship Pioneering

Gosik, Kirk, 2017 – 2020, Scientist, Ascidian Therapeutics

Leney-Greene, Michael, 2019 – 2020, Postdoctoral fellow, Blainey lab, Broad Institute

Geiger-Schuller, Katie, 2017 – 2020, Senior Scientist, Genentech

Heimberg, McDonnell Fellow, Graham, 2019 – 2020, Scientist, Genentech

Harvey, Tyler, NIH NRSA Fellow, 2019 – 2020. Scientist, Prime Medicine.

Thakore, Pratiksha, NIH NRSA Fellow, 2017 – 2021, Senior Scientist, Genentech

Schapiro, Denis, SNF and Damon Runyon Fellow, 2018 – 2021, Assistant Professor, University

of Heidelberg

Levy, Gahl, 2019 – 2020

Hofree, Matan, 2015 – present

Avraham-Davidi, Inbal, 2015 – present

Oren, Yaara, Hopes Fellow, 2016 – present

Benhar, Inbal, HFSP Fellow, 2016 – present

Fiskin, Evgenij, EMBO Fellow, 2017 – present

Ding, Jiarui 2017 – present

Vockley, Chris, 2017 – present

Habibi, Ehsan, 2017 – present

Silverbush, Dana, EMBO Fellow, 2018 – present

Tao, Liming, 2018 – present

Ursu, Oana, 2018 – present

Bray, Nicolas, 2018 – 2020, Postdoctoral fellow, Blainey lab, Broad Institute

Torlai Triglia, Elena, 2018 – present

Klughammer, Johanna, EMBO and HFSP fellow, 2018 – present

Chen, Xun, 2018 – present

Rubin, Adam, Helen Hay Whitney Fellow, 2018 – present

Eraslan, Gocken, 2018 – present

Kobayashi, Koseki, Japan Science Fellow, 2018 – present

Chung, Hattie, 2018 – present

Hwang, William, 2018 – present

Montoro, Daniel, NIH NRSA Fellow, 2019 – present

Petljak, Mia, EMBO Fellow, 2019 – present

Hütter, Jan Christian, 2019 – present

Jagadeesh, Karthik, NIH NRSA Fellow, 2019 – present

Yadollahpour, Payman, 2019 – present

Kappel, Kalli, Schmidt Fellow and Hanna Grey Fellow, 2019 – present

Ph.D. Students Supervised:

Wapinski, Ilan, *Genome-wide Reconstruction of Gene Histories in Yeasts*, 2008, Systems Biology / Damon Runyon Fellow, Kishony Lab, Harvard University. Current position: Director of Computational Biology, PathAI

Tsankov, Alex, *Evolution of Nucleosome Positioning and Gene Regulation in Yeasts: a Genomic and Computational Approach*, 2010, NIH NRSA Fellow, Harvard University. Current position: Assistant Professor, Mt Sinai School of Medicine, NYC

Shefi-Novershtern, Noa, *Transcription regulation models and their application to human disease research*, 2011, Current position: Senior Scientist (tenured Staff Scientist), Weizmann Institute of Science, Israel.

Funt, Jason, *Evolution's Footsteps: Reconstructing in vitro and in vivo Evolutionary Trajectories via Massively Parallel Sequencing and Profiling*, 2012. Vice President, Computational Biology;

Immuneering Corporation

Chan, Michelle, *DNA methylation in early mammalian development*, 2013. Postdoctoral fellow, Weissman Lab, UCSF.

Yassour, Moran, *Characterizing transcriptomes from high throughput sequencing data*, 2012, postdoctoral fellow, Xavier and Lander labs, MGH and Broad Institute. Current position: Senior Lecturer (equivalent of tenure track assistant professor), Hebrew University, Israel

Leite, Ana Paula, *Integrative approaches for systemic reconstruction of regulatory circuits in mammals*, 2012, Staff Scientist, University College, London, UK. Current position: Computational Biologist, Glaxo SmithKline

Cabili, Moran Nataly, *Towards a comprehensive understanding of human large intergenic non-coding RNAs (lincRNAs): mapping, evolution and function*, 2014. Postdoctoral fellow, Rinn Lab, Broad Institute. Current position: Associate Director, Data Strategy & Product, Foundation Medicine.

Rabani, Michal, *Models of dynamic RNA regulation in mammalian cells*, 2014. McDonnell Fellow, Schier Lab, Harvard University. Current position: Senior Lecturer (equivalent of tenure track assistant professor), Technion, Israel

Chen, Jenny, *The Evolution of Gene Regulation in the Mammalian Lineage*, 2018. Current position: Data Science Fellow, Harvard University.

Dixit, Atray, *Combinatorial regulation of gene expression*, 2018. Current position: Co-Founder and CEO, Coral Genomics, San Francisco, CA

Ter-Ovanesyan, Dmitry, *Exosomes and intercellular RNA transfer*, 2018. Current position: Postdoctoral fellow, Walt lab, Wyss Institute and Harvard.

Cleary, Brian, *The bases of life*, 2019. Current position: Broad Fellow

Gootenberg, Jonathan *New tools for genome and transcriptome editing*, 2019. Current position: McGovern Fellow, MIT.

Herbst, Rebecca, *Leveraging single-cell RNA-sequencing to study longitudinal anti-tumor immune response and the developing choroid plexus across brain regions*, 2020. Current position: Scientist, AIImmune

Liu, Yunpeng, *Living (not quite) half a life - understanding unique vulnerabilities in near-haploid leukemia*. Senior Scientist, BioNTech.

Marjanovic, Nemanja, *in progress*

Muus, Christoph, *in progress*

Dai Yang, Karren, *in progress*

Dhaval Vaishnav, Eeshit, *in progress*

Shiffman, Miriam, *in progress*

Sinha, Anubhav, *in progress*

Baker, Ethan, *in progress*

Ezike, Jideofor, *in progress*

Teaching

7.03, Genetics: Spring 2009, Spring 2010, Fall 2011, Spring 2011, Spring 2013, Spring 2014, Spring 2015, Spring 2016, Spring 2017, Spring 2018, Fall 2018, Spring 2019, Fall 2019, Spring 2020

7.57, Quantitative Biology: Spring 2008, Spring 2009, Spring 2010, Spring 2011, Spring 2013, Spring 2014, Spring 2015, Spring 2016, Spring 2017, Spring 2018

Selected Internal Service (MIT)

Member, Search Committee for Inaugural Dean, College of Computing, 2018-2019

Member, Executive Committee, Department of Biology

Member, Institutional Committee on Work/Life Balance

Member, Faculty Search Committee (multiple years)

Selected Internal Service (Broad Institute)

Chair of the Faculty And Member, Executive Leadership Team

Chair, Broad*next*10 Scientific Frontiers (strategic planning)

Member, Scientific Planning and Allocation of Resources Committee: SPARC

Selected External Service

Corporate Advisory Boards

Scientific Advisory Board, Neogene Therapeutics, 2019 - 2020

Scientific Advisory Board, Asimov, 2019 - 2020

Observer, Board of Directors, Celsius Therapeutics, 2018 - 2020

Scientific Advisory Board, ThermoFisher Scientific, 2014 - 2020

Scientific Advisory Board, Syros Pharmaceuticals, 2013 - 2020

Academic Advisory Boards

Board of Scientific Councilors, Memorial Sloan Kettering Cancer Center, 2019-present

Institutional Advisory Board, VIB Life Sciences Research Institute (VIB), 2019-present

Scientific Advisory Board, Flatiron Institute, 2019-present

Scientific Advisory Board, St. Jude Children's Research Hospital, 2017-present

Biology Task Force, Defense Science Board, 2017 - 2020

Advisory Council, National Human Genome Research Institute, 2017 - 2020

Scientific Advisory Board, SciLife Lab (Karolinska and Uppsala), Sweden, 2014-present

Scientific Advisory Board, Jackson Laboratory, Bar Harbor, ME, 2013-2019

Scientific Advisory Board, Simons Institute for the Theory of Computing, UC Berkeley, 2013-present

Selected Journal Editorial Boards

Member, Advisory Board, *Med* (Cell Press), 2020 – present

Member, Editorial Board, *Cell Genomics*, 2020 - present

Member, Editorial Board, *Cancer Cell*, 2020 - present

Member, Editorial Board, *Cell*, 2016 – present

Senior Editor, *eLife*, 2014 – 2018

Member, Board of Reviewing Editors, *eLife*, 2012-2014

Editorial Board Member, *Nature/EMBO Molecular Systems Biology*, 2013 – present

Bibliography

* Senior/Corresponding Author

Preprints on bioRxiv, arXiv, and medRxiv (not yet accepted in a peer-reviewed journal)

2021

1. Jagadeesh KA, Dey KK, Montoro DT, Gazal S, Engreitz JM, Xavier RJ, Price AL and **Regev A** (2021). Identifying disease-critical cell types and cellular processes across the human body by integration of single-cell profiles and human genetics. bioRxiv doi: 10.1101/2021.03.19.436212.
2. Vaishnav ED, de Boer C, Yassour M, Molinet J, Fan L, Adiconis X, Thompson DA, Cubillos FA, Levin JZ, **Regev A** (2021). A comprehensive fitness landscape model reveals the evolutionary history and future evolvability of eukaryotic *cis*-regulatory DNA sequences. bioRxiv doi: 10.1101/2021.02.17.430503.
3. Chung H, Parkhurst CN, Magee EM, Phillips D, Habibi E, Chen F, Yeung B, Waldman J, Artis D, **Regev A** (2021). Simultaneous single cell measurements of intranuclear proteins and gene expression. bioRxiv doi: 10.1101/2021.02.18.427139.
4. Pelka K, Hofree M, Chen J...Anderson AC, Rozenblatt-Rosen O, **Regev A***, Hacohen N* (2021). Multicellular immune hubs and their organization in MMRd and MMRp colorectal cancer. bioRxiv doi: 10.1101/2021.01.30.426796.
5. Kaur G, Porter CB, Ashenberg O, Lee J, Riesenfeld SJ, Hofree M, Aggelakopoulou M, Subramanian A, Kuttikkatte SB, Attfield KE, Desel CA, Davies JL, Evans HG, Avraham-Davidi I, Nguyen LT, Dionne DA, Neumann AE, Jensen LT, Barber TR, Soilleux E, Carrington M, McVean G, Rozenblatt-Rosen O, **Regev A*** and Fugger L* (2021). Parental-fetal interplay of immune genes leads to intrauterine growth restriction. bioRxiv doi: 10.1101/2021.03.26.437292.
6. Andrews TS, Atif J, Liu JC, Perciani CT, Ma X, Thoeni C, Slyper M, Eraslan G, Segerstolpe A, Manuel J, Chung S, Winter E, Cirlan I, Khuu N, Fischer S, Rozenblatt-Rosen O, **Regev A**, McGilvray ID, Bader GD and MacParland SA (2021). Single Cell, Single Nucleus and Spatial RNA Sequencing of the Human Liver Identifies Hepatic Stellate Cell and Cholangiocyte Heterogeneity. bioRxiv doi: 10.1101/2021.03.27.436882.
7. Schapiro D, Sokolov A, Yapp C, Muhlich JL, Hess J, Lin J, Chen Y, Nariya MK, Baker GJ, Ruokonen J, Maliga Z, Jacobson CA, Farhi SL, Abbondanza D, McKinley ET, Betts C, **Regev A**, Coffey RJ, Coussens LM, Santagata S and Sorger PK (2021). MCMICRO: A scalable, modular image-processing pipeline for multiplexed tissue imaging. bioRxiv, doi: 10.1101/2021.03.15.435473.
8. Pawlak M, DeTomaso D, Meyer zu Horste G, Lee Y, Nyman J, Dionne D, Wang C, Wallrapp A, Burkett PR, Riesenfeld SJ, Anderson AC, **Regev A**, Xavier RJ, Yosef N, Kuchroo VK (2021). Induction of a colitogenic phenotype in Th1 cells depends on IL-23R signaling. bioRxiv doi: 10.1101/2021.01.24.426445.

2020

9. Chun X, Gentili M, Hacohn N, **Regev A** (2020). A cell-free antibody engineering platform rapidly generates SARS-CoV-2 neutralizing antibodies. bioRxiv doi: 10.1101/2020.10.29.361287.
10. Vickovic S, Lötstedt B, Klughammer J, Segerstolpe Å, Rozenblatt-Rosen O, **Regev A** (2020). SM-Omics: An automated platform for high-throughput spatial multi-omics. bioRxiv doi: 10.1101/2020.10.14.338418.
11. Ursu O, Neal JT, Shea E, Thakore PI, Jerby-Arnon L, Nguyen L, Dionne D, Diaz C, Bauman J, Mosaad MM, Fagre C, Giacomelli AO, Ly SV, Rozenblatt-Rosen O, Hahn WC, Aguirre AJ, Berger AH, **Regev A***, Boehm JS* (2020). Massively parallel phenotyping of variant impact in cancer with Perturb-seq reveals a shift in the spectrum of cell states induced by somatic mutations. bioRxiv doi:10.1101/2020.11.16.383307.
12. Jerby-Arnon L, **Regev A** (2020). Mapping multicellular programs from single-cell profiles. bioRxiv doi: 10.1101/2020.08.11.245472.

13. Hwang WL, Jagadeesh KA, Guo JA, Hoffman HI, Yadollahpour P, Mohan R, Drokhlyansky E, Van Wittenberghe N, Ashenberg O, Farhi S, Schapiro D, Reeves JW, Zollinger DR, Eng G, Schenkel JM, Freed-Pastor WA, Rodrigues C, Gould J, Lambden C, Porter C, Tsankov A, Dionne D, Abbondanza D, Waldman J, Cuoco MS, Nguyen L, Delorey T, Phillips D, Ciprani D, Kern M, Mehta A, Fuhrman K, Fropf R, Beechem JM, Loeffler JS, Ryan DP, Weekes CD, Ting DT, Ferrone CR, Wo JY, Hong TS, Aguirre AJ, Rozenblatt-Rosen O, Mino-Kenudson M, Fernandez-del Castillo C, Liss AS, Jacks T, **Regev A** (2020). Single-nucleus and spatial transcriptomics of archival pancreatic cancer reveals multi-compartment reprogramming after neoadjuvant treatment. bioRxiv doi:10.1101/2020.08.25.267336.
14. Cain A, Taga M, McCabe C, Hekselman I, White CC, Green G, Rozenblatt-Rosen O, Zhang F, Yeger-Lotem E, Bennett DA, Yang HS, **Regev A**, Menon V, Habib N, De Jager PL (2020). Multi-cellular communities are perturbed in the aging human brain and with Alzheimer's disease. bioRxiv doi: 10.1101/2020.12.22.424084.
15. Vickovic S, Schapiro D, Carlberg K, Lötstedt B, Larsson L, Korotkova M, Hensvold AH, Catrina AI, Sorger PK, Malmström V, **Regev A**, Ståhl PL (2020). Three-dimensional spatial transcriptomics uncovers cell type dynamics in the rheumatoid arthritis synovium. bioRxiv doi: 10.1101/2020.12.10.420463.
16. Paulsen B, Velasco S, Kedaigle AJ, Pigoni M, Quadrato G, Deo A, Adiconis X, Uzquiano A, Kim K, Simmons SK, Tsafou K, Albanese A, Sartore R, Abbate C, Tucewicz, Smith S, Chung K, Lage K, **Regev A**, Levin JZ, Arlotta P (2020). Human brain organoids reveal accelerated development of cortical neuron classes as a shared feature of autism risk genes. bioRxiv doi: 10.1101/2020.11.10.376509.
17. Brain Initiative Cell Census Network (BICCN) et al (2020). A multimodal cell census and atlas of the mammalian primary motor cortex. bioRxiv doi: 10.1101/2020.10.19.343129.
18. Beyaz S, Roper J, Bauer-Rowe KE, Xifaras ME, Ergin I, Dohnalova L, Biton M, Shekar K, Mou H, Eskiocak O, Özata DM, Papciak K, Chung C, Almeqdadi M, Fein M, Valle-Encinas E, Erdemir A, Dogum K, Garipcan A, Meyer H, Fox JG, Elinav E, Kucukural A, Kumar P, McAleer J, Thaiss CA, **Regev A**, Orkin SH, Yilmaz ÖH (2020). Dietary suppression of MHC-II expression in intestinal stem cells enhances intestinal tumorigenesis. bioRxiv doi: 10.1101/2020.09.05.284174.
19. Norman M, Ter-Ovanesyan, Trieu W, Lazarovits R, Kowal EJK, Lee JH, Chen-Plotkin AS, **Regev A**, Church GM, Walt DR (2020). LICAM is not associated with extracellular vesicles in human cerebrospinal fluid or plasma. bioRxiv doi: 10.1101/2020.08.12.247833.
20. Subramanian A, Vernon KA, Slyper M, Waldman J, Luecken MD, Gosik K, Dubinsky D, Cuoco MS, Keller K, Purnell J, Nguyen L, Dionne D, Rozenblatt-Rosen O, Weins A, Human Cell Atlas Lung Biological Network, **Regev A**, Greka A (2020). RAAS blockade, kidney disease, and expression of *ACE2*, the entry receptor for SARS-CoV-2, in kidney epithelial and endothelial cells. bioRxiv doi: 10.1101/2020.06.23.167098.
21. Bakken TE, Jorstad NL, Hu Q, Lake BB, Tian W, Kalmbach BE, Crow M, Hodge RD, Krienen FM, Sorensen SA, Eggermont J, Yao Z, Aevermann BD, Aldridge AI, Bartlett A, Bertagnolli D, Casper T, Castanon RG, Crichton K, Daigle TL, Dalley R, Dee N, Dembrow N, Diep D, Ding SL, Dong W, Fang R, Fischer S, Goldman M, Goldy J, Graybuck LT, Herb BR Hou X, Kancherla J, Kroll M, Lathia K, van Lew B, Li YE, Liu CS, Liu H, Lucer JD, Mahurkar A, McMillen D, Miller JA, Moussa M, Nery JR, Nicovich PR, Orvis J, Osteen JK, Owen S, Palmer CR, Pham T, Plongthongkum N, Poirion O, Reed NM, Rimorin C, Rivkin A, Romanow WJ, Sedenio-Cortes AE, Siletti K, Somasundaram S, Sulc J, Tieu M, Torkelson A, Tung H, Wang X, Xie F, Yanny AM, Zhang R, Ament SA, Behrens MM, Bravo HC, Chun J, Dobin A, Gillis J, Hertzano R, Hof PR, Holt T, Horwitz GD, Keene CD, Kharchenko PV, Ko AL, Lelieveldt BP, Luo C, Mukamel EA, Preissl S, **Regev A**, Ren B, Scheuermann RH, Smith K, Spain WJ, White OR, Koch C, Hawrylycz M, Tasic B, Macosko EZ, McCarroll SA, Ting JT, Zeng H, Zhang K, Feng G, Ecker JR, Linnarsson S, Lein ES (2020). Evolution of cellular diversity in primary motor cortex of human, marmoset monkey, and mouse. bioRxiv doi: 10.1101/2020.03.31.016972.

22. Kozareva V, Martin C, Osorno T, Rudolph S, Guo C, Vanderburg C, Nadaf N, **Regev A**, Regehr W, Macosko E (2020). A transcriptomic atlas of the mouse cerebellum reveals regional specializations and novel cell types. *bioRxiv* doi: 10.1101/2020.03.04.976407.
23. Yao Z, Liu H, Xie F, Fischer S, Adkins RS, Aldrige AI, Ament SA, Bartlett A, Behrens MM, Van den Berge K, Bertagnolli D, Biancalani T, Boeshaghi AS, Bravo HC, Casper T, Colantuoni C, Crabtree J, Creasy H, Crichton K, Crow M, Dee N, Dougherty EL, Dyle WI, Dudoit S, Fang R, Felix V, Fong O, Giglio M, Goldy J, Hawrylycz M, de Bezieux HR, Herb BR, Hertzano R, Hou X, Hu Q, Huang ZJ, Kancherla J, Kroll M, Lathia K, Li YE, Lucero JD, Luo C, Mahurkar A, McMillen D, Nadaf NM, Nery JR, Nguyen TN, Niu S-Y, Vtranos V, Orvis J, Osteen JK, Pham T, Pinto-Duarte A, Poirion O, Preissl S, Purdom E, Rimorin C, Risso D, Rivkin AC, Smith K, Street K, Sulc J, Svensson V, Tieu M, Torkelson A, Tung H, Vaishnav ED, Vanderburg CR, van Velthoven C, Wang X, White O, Gillis J, Kharchenko PV, Ngai J, Pachter L, **Regev A** Tasic B, Welch JD, Ecker JR, Macosko E, Ren B, BRAIN Initiative Cell Census Network (BICCN), Zeng H, Mukamel EA (2020). An integrated transcriptomic and epigenomic atlas of mouse primary motor cortex cell types. *bioRxiv* 2020.02.29.970558; doi: <https://doi.org/10.1101/2020.02.29.970558>.
24. Wang C, Wagner A, Fessler J, Avila-Pacheco J, Karminski J, Thakore P, Zaghouni S, Pierce K, Bod L, Schnell A, DeTomaso D, Ron-Harel N, Haigis M, Puleston D, Pearce E, Soleimani M, Sobel R, Clish C, **Regev A**, Yosef N, Kuchroo VK (2020). Metabolic and epigenomic regulation of Th17/Treg balance by the polyamine pathway. *bioRxiv* 2020.01.23.911966; doi: <https://doi.org/10.1101/2020.01.23.911966>.

2019 and earlier

25. Dixit A, Kuksenko O, Feldman D, **Regev A*** (2019). Shuffle-Seq: En masse combinatorial encoding for n-way genetic interaction screens. *bioRxiv* 861443; doi: <https://doi.org/10.1101/861443>.
26. Tabaka M, Gould J, **Regev A*** (2019). scSVA: an interactive tool for big data visualization and exploration in single-cell omics. *bioRxiv* 512582; doi: <https://doi.org/10.1101/512582>. *In revision after review*.
27. Mao P, Cohen O, Kowalski KJ, Kusiel JG, Buendia-Buendia JE, Cuoco MS, Exman P, Wander SA, Waks AG, Nayar U, Chung J, Freeman S, Rozenblatt-Rosen O, Miller VA, Piccioni F, Root DE, **Regev A**, Winer EP, Lin NU, Wagle N (2019). Acquired FGFR and FGF alterations confer resistance to estrogen receptor (ER) targeted therapy in ER+ metastatic breast cancer. *Clinical Cancer Research*; doi: 10.1158/1078-0432.CCR-19-3958
28. Shay T, Jojic V, Zuk O, Benoist C, Koller D, **Regev A**, ImmGen Consortium, et al. (2018). Conservation and divergence in modules of the transcriptional programs of the human and mouse immune systems. *bioRxiv* 286211; doi: <https://doi.org/10.1101/286211>.
29. **Regev A***, Teichmann S, Rozenblatt-Rosen O, Stubbington M, Ardlie K, Amit I, Arlotta P, Bader G, Benoist C, Biton M, Bodenmiller B, Bruneau B, Campbell P, Carmichael M, Carninci P, Castelo-Soccio L, Clatworthy M, Clevers H, Conrad C, Eils R, Freeman J, Fugger L, Goettgens B, Graham D, Greka A, Hacohen N, Haniffa M, Helbig I, Heuckeroth R, Kathiresan S, Kim S, Klein A, Knoppers B, Kriegstein A, Lander E, Lee J, Lein E, Linnarsson S, Macosko E, MacParland S, Majovski R, Majumder P, Marioni J, McGilvray I, Merad M, Mhlanga M, Naik S, Nawijn M, Nolan G, Paten B, Pe'er D, Philippakis A, Ponting C, Quake S, Rajagopal J, Rajewsky N, Reik W, Rood J, Saeb-Parsy K, Schiller H, Scott S, Shalek A, Shapiro E, Shin J, Skeldon K, Stratton M, Streicher J, Stunnenberg H, Tan K, Taylor D, Thorogood A, Vallier L, van Oudenaarden A, Watt F, Weicher W, Weissman J, Wells A, Wold B, Xavier R, Zhuang X, Human Cell Atlas Organizing Committee (2018). The Human Cell Atlas White Paper. *arXiv*: 1810.05192.

Peer-reviewed publications

Accepted

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