THE HEBREW UNIVERSITY OF JERUSALEM

# ELSC Member's Publications: January – June 2020

Hagai Bergman

1. Kaplan, A., A. D. Mizrahi-Kliger, Z. Israel, A. Adler, and H. Bergman. 2020. 'Dissociable roles of ventral pallidum neurons in the basal ganglia reinforcement learning network', *Nat Neurosci*, 23: 556-64.
2. Marmor, O., P. Rappel, D. Valsky, A. S. Bick, D. Arkadir, E. Linetsky, O. Peled, I. Tamir, H. Bergman, Z. Israel, and R. Eitan. 2020. 'Movement context modulates neuronal activity in motor and limbic-associative domains of the human parkinsonian subthalamic nucleus', *Neurobiol Dis*, 136: 104716.
3. Mizrahi-Kliger, A. D., A. Kaplan, Z. Israel, M. Deffains, and H. Bergman. 2020. 'Basal ganglia beta oscillations during sleep underlie Parkinsonian insomnia', *Proc Natl Acad Sci U S A*.
4. Peles, O., U. Werner-Reiss, H. Bergman, Z. Israel, and E. Vaadia. 2020. 'Phase-Specific Microstimulation Differentially Modulates Beta Oscillations and Affects Behavior', *Cell Rep*, 30: 2555-66 e3.
5. Rappel, P., S. Grosberg, D. Arkadir, E. Linetsky, M. Abu Snineh, A. S. Bick, I. Tamir, D. Valsky, O. Marmor, Y. Abo Foul, O. Peled, M. Gilad, C. Daudi, S. Ben-Naim, H. Bergman, Z. Israel, and R. Eitan. 2020. 'Theta-alpha oscillations characterize emotional subregion in the human ventral subthalamic nucleus', *Mov Disord*, 35: 337-43.
6. Snineh, M. A., A. Hajyahya, E. Linetsky, R. Eitan, H. Bergman, Z. Israel, and D. Arkadir. 2020. 'A Real-Life Search for the Optimal Set of Conversion Factors to Levodopa-Equivalent-Dose in Parkinson's Disease Patients on Polytherapy', *J Parkinsons Dis*, 10: 173-78.
7. Valsky, D., K. T. Blackwell, I. Tamir, R. Eitan, H. Bergman, and Z. Israel. 2020. 'Real-time machine learning classification of pallidal borders during deep brain stimulation surgery', *J Neural Eng*, 17: 016021.

Alexander Binshtok

8. Leibovich, H., N. Buzaglo, S. Tsuriel, L. Peretz, Y. Caspi, B. Katz, S. Lev, D. Lichtstein, and A. M. Binshtok. 2020. 'Abnormal Reinnervation of Denervated Areas Following Nerve Injury Facilitates Neuropathic Pain', *Cells*, 9.

Leon Deouell

9. Auerbach-Asch, C. R., O. Bein, and L. Y. Deouell. 2020. 'Face Selective Neural Activity: Comparisons Between Fixed and Free Viewing', *Brain Topogr*, 33: 336-54.
10. Pirondini, E., N. Goldshuv-Ezra, N. Zinger, J. Britz, N. Soroker, L. Y. Deouell, and D. V. Ville. 2020. 'Resting-state EEG topographies: Reliable and sensitive signatures of unilateral spatial neglect', *Neuroimage Clin*, 26: 102237.

Naomi Habib

11. Habib, N., C. McCabe, S. Medina, M. Varshavsky, D. Kitsberg, R. Dvir-Szternfeld, G. Green, D. Dionne, L. Nguyen, J. L. Marshall, F. Chen, F. Zhang, T. Kaplan, A. Regev, and M. Schwartz. 2020. 'Disease-associated astrocytes in Alzheimer's disease and aging', *Nat Neurosci*, 23: 701-06.

Mati Joshua

12. Lixenberg, A., M. Yarkoni, Y. Botschko, and M. Joshua. 2020. 'Encoding of eye movements explains reward-related activity in cerebellar simple spikes', *J Neurophysiol*, 123: 786-99.

THE HEBREW UNIVERSITY OF JERUSALEM

Leo Joskowicz

13. Shamul, N., and L. Joskowicz. 2020. 'Automatic Change Detection in Sparse Repeat CT Scanning', *IEEE Trans Med Imaging*, 39: 48-61.

Chaya Kalcheim

14. Kahane, N. and Kalcheim, C (2020). Neural tube development depends on notochord-derived Sonic hedgehog released into the sclerotome. Development 147, dev183996. doi:10.1242/ dev183996. Recommended by Faculty Opinions (F1000 )
15. Yang, J, Antin, P, Berx, B, Blanpain, C, Brabletz, T, Bronner, M, Campbell, K, Cano, A, Casanova, J, Christofori, G, Dedhar, S, Derynck, R, Ford, H,L, Fuxe, J, de Herreros, AG, Goodall, G.J, HadjantonakisA-K, Huang, R.J.Y, Kalcheim, C, Kalluri, R, Kang, Y, Goodall, Y.K, Levine, H, Liu, J, Longmore, G.D, Mani, S.A, Massagué, J, Mayor, R, McClay, D, Mostov, K.E, Newgreen, D.F, Nieto, M.A, Puisieux, A, Runyan, R, Savagner, P, Stanger, B, Stemmler, M.P, Takahashi, Y, Takeichi, M, Thiery, J.P, Thompson, E.W, Weinberg, R.A , Elizaeth Williams, E, Xing, J, Zhou, B.P, Sheng, G. (2020). Definitions and Guidelines for Research on Epithelial-Mesenchymal Transition. Nature Reviews Molec. Cell. Biol. doi: 10.1038/s41580-020-0237-9.

Yonatan Loewenstein

16. Grodzinsky, Y., I. Deschamps, P. Pieperhoff, F. Iannilli, G. Agmon, Y. Loewenstein, and K. Amunts. 2020. 'Logical negation mapped onto the brain', *Brain Struct Funct*, 225: 19-31.

Eran Meshorer

17. Mandemaker, I. K., D. Zhou, S. T. Bruens, D. H. Dekkers, P. J. Verschure, R. R. Edupuganti, E. Meshorer, J. A. A. Demmers, and J. A. Marteijn. 2020. 'Histone H1 eviction by the histone chaperone SET reduces cell survival following DNA damage', *J Cell Sci*, 133.
18. Ben-Ami, R., A. Klochendler, M. Seidel, T. Sido, O. Gurel-Gurevich, M. Yassour, E. Meshorer, G. Benedek, I. Fogel, E. Oiknine-Djian, A. Gertler, Z. Rotstein, B. Lavi, Y. Dor, D. G. Wolf, M. Salton, Y. Drier, and Covid-diagnosis team Hebrew University-Hadassah. 2020. 'Large-scale implementation of pooled RNA extraction and RT-PCR for SARS-CoV-2 detection', *Clin Microbiol Infect*.
19. Cohen-Carmon, D., M. Sorek, V. Lerner, M. S. Divya, M. Nissim-Rafinia, Y. Yarom, and E. Meshorer. 2020. ' Progerin-Induced Transcriptional Changes in Huntington's Disease Human Pluripotent Stem Cell-Derived Neurons', *Mol Neurobiol*, 57: 1778.
20. Gokhman, D., N. Mishol, M. de Manuel, D. de Juan, J. Shuqrun, E. Meshorer, T. Marques-Bonet, Y. Rak, and L. Carmel. 2020. 'Reconstructing Denisovan Anatomy Using DNA Methylation Maps', *Cell*, 180: 601.
21. Gokhman, D., M. Nissim-Rafinia, L. Agranat-Tamir, G. Housman, R. Garcia-Perez, E. Lizano, O. Cheronet, S. Mallick, M. A. Nieves-Colon, H. Li, S. Alpaslan-Roodenberg, M. Novak, H. Gu, J. M. Osinski, M. Ferrando-Bernal, P. Gelabert, I. Lipende, D. Mjungu, I. Kondova, R. Bontrop, O. Kullmer, G. Weber, T. Shahar, M. Dvir-Ginzberg, M. Faerman, E. E. Quillen, A. Meissner, Y. Lahav, L. Kandel, M. Liebergall, M. E. Prada, J. M. Vidal, R. M. Gronostajski, A. C. Stone, B. Yakir, C. Lalueza-Fox, R. Pinhasi, D. Reich, T. Marques-Bonet, E. Meshorer, and L. Carmel. 2020. 'Differential DNA methylation of vocal and facial anatomy genes in modern humans', *Nat Commun*, 11: 1189.

22. Goldshtein, M., M. Mellul, G. Deutch, M. Imashimizu, K. Takeuchi, E. Meshorer, O. Ram, and D. B. Lukatsky. 2020. 'Transcription Factor Binding in Embryonic Stem Cells Is Constrained by DNA Sequence Repeat Symmetry', *Biophys J*, 118: 2015-26.
23. Lim, P. S. L., and E. Meshorer. 2020. 'Dppa2 and Dppa4 safeguard bivalent chromatin in order to establish a pluripotent epigenome', *Nat Struct Mol Biol*.
24. Mallm, J. P., P. Windisch, A. Biran, Z. Gal, S. Schumacher, R. Glass, C. Herold-Mende, E. Meshorer, M. Barbus, and K. Rippe. 2020. 'Glioblastoma initiating cells are sensitive to histone demethylase inhibition due to epigenetic deregulation', *Int J Cancer*, 146: 1281-92.
25. Mathov Y, Batyrev D, Meshorer E, Carmel L. Harnessing epigenetics to study human evolution [published online ahead of print, 2020 Jun 20]. Curr Opin Genet Dev. 2020;62:23-29. doi:10.1016/j.gde.2020.05.023
26. Lim PSL, Meshorer E. Dppa2 and Dppa4 safeguard bivalent chromatin in order to establish a pluripotent epigenome [published online ahead of print, 2020 Jun 22]. Nat Struct Mol Biol. 2020;10.1038/s41594-020-0453-1. doi:10.1038/s41594-020-0453-1

Aviv Mezer

27. Bruckert, L., K. E. Travis, A. A. Mezer, M. Ben-Shachar, and H. M. Feldman. 2020. 'Associations of Reading Efficiency with White Matter Properties of the Cerebellar Peduncles in Children', *Cerebellum*.
28. Schurr, R., A. Zelman, and A. A. Mezer. 2020. 'Subdividing the superior longitudinal fasciculus using local quantitative MRI', *Neuroimage*, 208: 116439.
29. Shtangel, O., and A. A. Mezer. 2020. 'A phantom system for assessing the effects of membrane lipids on water proton relaxation', *NMR Biomed*, 33: e4209.

Adi Mizrahi

30. GILAD A., MAOR I. AND MIZRAHI. A. (2020) Learning-related population dynamics in auditory thalamus. eLife 9:e56307.
31. MIZRAHI A. and VINOGRAD A. (2020) Synaptogenesis in the Adult CNS-Olfactory system. Book chapter. In: RUBENSTEIN J. L. R. and RAKIC P. (1st ed.) Comprehensive Developmental Neuroscience: Synapse Development and Maturation, pp. 255-274 Amsterdam: Elsevier Inc.
32. TASAKA G., FEIGIN L., MAOR I., GROYSMAN M., DENARDO L., SCHIAVO J., FROEMKE R., LUO L., AND MIZRAHI A. (2020) The temporal association cortex is involved in auditory driven maternal plasticity. Neuron. 107, 1-14.
33. DUDAI D., YAYON N., LERNER V., TASAKA G., DEITCHER Y., NIEDERHOFFE N., MIZRAHI A., SOREQ H., AND LONDON M. (2020) Functional characterization of cortical ChAT/VIP interneurons and their effect on the circuit in vivo. PLoS Biology 18(2): e3000613.
34. MAOR, I., ZIV, R., FEIGIN, L., ELYADA Y., SOMPOLINSKI H., MIZRAHI A. (2020) Neural correlates of learning pure tones or natural sounds in the auditory cortex. Frontiers in Neural Circuits. fncir.2019.00082.

Israel Nelken

35. Awwad, B., M. M. Jankowski, and I. Nelken. 2020. 'Synaptic Recruitment Enhances Gap Termination Responses in Auditory Cortex', *Cereb Cortex*.

36. Yaron, A., M. M. Jankowski, R. Badrieh, and I. Nelken. 2020. 'Stimulus-specific adaptation to behaviorally-relevant sounds in awake rats', *PLoS One*, 15: e0221541.

Idan Segev

37. Amsalem, O., G. Eyal, N. Rogozinski, M. Gevaert, P. Kumbhar, F. Schurmann, and I. Segev. 2020. 'An efficient analytical reduction of detailed nonlinear neuron models', *Nat Commun*, 11: 288.
38. Benavides-Piccione, R., M. Regalado-Reyes, I. Fernaud-Espinosa, A. Kastanauskaite, S. Tapia-Gonzalez, G. Leon-Espinosa, C. Rojo, R. Insausti, I. Segev, and J. DeFelipe. 2020. 'Differential Structure of Hippocampal CA1 Pyramidal Neurons in the Human and Mouse', *Cereb Cortex*, 30: 730-52.
39. Iascone, D. M., Y. Li, U. Sumbul, M. Doron, H. Chen, V. Andreu, F. Goudy, H. Blockus, L. F. Abbott, I. Segev, H. Peng, and F. Polleux. 2020. 'Whole-Neuron Synaptic Mapping Reveals Spatially Precise Excitatory/Inhibitory Balance Limiting Dendritic and Somatic Spiking', *Neuron*, 106: 566-78 e8.
40. Lefler, Y., O. Amsalem, N. Vrieler, I. Segev, and Y. Yarom. 2020. 'Using subthreshold events to characterize the functional architecture of the electrically coupled inferior olive network', *Elife*, 9.
41. Moldwin, T., and I. Segev. 2020. 'Perceptron Learning and Classification in a Modeled Cortical Pyramidal Cell', *Front Comput Neurosci*, 14: 33.

Haim Sompolinsky

42. Cohen, U., S. Chung, D. D. Lee, and H. Sompolinsky. 2020. 'Separability and geometry of object manifolds in deep neural networks', *Nat Commun*, 11: 746.
43. Maor, I., R. Shwartz-Ziv, L. Feigin, Y. Elyada, H. Sompolinsky, and A. Mizrahi. 2019. 'Neural Correlates of Learning Pure Tones or Natural Sounds in the Auditory Cortex', *Front Neural Circuits*, 13: 82.

Hermona Soreq

44. Dudai, A., N. Yayon, V. Lerner, G. I. Tasaka, Y. Deitcher, K. Gorfine, N. Niederhoffer, A. Mizrahi, H. Soreq, and M. London. 2020. 'Barrel cortex VIP/ChAT interneurons suppress sensory responses in vivo', *PLoS Biol*, 18: e3000613.
45. Lackie, R. E., A. R. Razzaq, S. M. K. Farhan, L. R. Qiu, G. Moshitzky, F. H. Beraldo, M. H. Lopes, A. Maciejewski, R. Gros, J. Fan, W. Y. Choy, D. S. Greenberg, V. R. Martins, M. L. Duennwald, J. P. Lerch, H. Soreq, V. F. Prado, and M. A. M. Prado. 2020. 'Modulation of hippocampal neuronal resilience during aging by the Hsp70/Hsp90 co-chaperone STI1', *J Neurochem*, 153: 727-58.
46. Madrer, N., and H. Soreq. 2020. 'Cholino-ncRNAs modulate sex-specific- and age-related acetylcholine signals', *FEBS Lett*.
47. Meydan, C., N. Uceyler, and H. Soreq. 2020. 'Non-coding RNA regulators of diabetic polyneuropathy', *Neurosci Lett*, 731: 135058.
48. Moshitzky, G., S. Shoham, N. Madrer, A. M. Husain, D. S. Greenberg, R. Yirmiya, Y. Ben-Shaul, and H. Soreq. 2020. 'Cholinergic Stress Signals Accompany MicroRNA-Associated Stereotypic Behavior and Glutamatergic Neuromodulation in the Prefrontal Cortex', *Biomolecules*, 10.
49. Schmitz, T. W., H. Soreq, J. Poirier, and R. N. Spreng. 2020. 'Longitudinal Basal Forebrain Degeneration Interacts with TREM2/C3 Biomarkers of Inflammation in Presymptomatic Alzheimer's Disease', *J Neurosci*, 40: 1931-42.
50. Shaheen, M., L. Schindler, R. Saar-Ashkenazy, K. Bani Odeh, H. Soreq, A. Friedman, and C. Kirschbaum. 2020. 'Victims of war-Psychoendocrine evidence for the impact of traumatic stress on psychological well-being of adolescents growing up during the Israeli-Palestinian conflict', *Psychophysiology*, 57:

e13271.

51. Simchovitz, A., M. Hanan, N. Yayon, S. Lee, E. R. Bennett, D. S. Greenberg, S. Kadener, and H. Soreq. 2020. 'A lncRNA survey finds increases in neuroprotective LINC-PINT in Parkinson's disease substantia nigra', *Aging Cell*, 19: e13115.
52. Vaknine, S., and H. Soreq. 2020. 'Central and peripheral anti-inflammatory effects of acetylcholinesterase inhibitors', *Neuropharmacology*, 168: 108020.
53. Mor Hanan[1,2], Alon Simchovitz[1,2], Nadav Yayon[1,2], Miriam Karmon[3], Roni Cohen-Fultheim[3], Nimrod Madrer[1,2], Talia Miriam Rohrlich[4], Moria Maman[4], Estelle R. Bennett[1], David S. Greenberg[1], Eran Meshorer[4], Erez Y. Levanon[3], Hermona Soreq*[1,2] and Sebastian Kadener*[5] **(2020). Resource of circRNAs in the PD brain identifies a modulation role for circSLC8A1.** EMBO Mol Med.

Yosef Yarom

54. Cohen-Carmon, D., M. Sorek, V. Lerner, M. S. Divya, M. Nissim-Rafinia, Y. Yarom, and E. Meshorer. 2020. 'Correction to: Progerin-Induced Transcriptional Changes in Huntington's Disease Human Pluripotent Stem Cell-Derived Neurons', *Mol Neurobiol*, 57: 1778.
55. 'Progerin-Induced Transcriptional Changes in Huntington's Disease Human Pluripotent Stem Cell-Derived Neurons'. 2020., *Mol Neurobiol*, 57: 1768-77.
56. Lefler, Y., O. Amsalem, N. Vrieler, I. Segev, and Y. Yarom. 2020. 'Using subthreshold events to characterize the functional architecture of the electrically coupled inferior olive network', *Elife*, 9.

**BioRxiv:**

Yoav Adam

57. High fidelity estimates of spikes and subthreshold waveforms from 1-photon voltage imaging *in vivo* Michael E. Xie, Yoav Adam, Linlin Z. Fan, Urs L. Böhm, Ian Kinsella, Ding Zhou, Liam Paninski, Adam E. Cohen bioRxiv 2020.01.26.920256; doi: https://doi.org/10.1101/2020.01.26.920256

Merav Ahissar

58. Training-induced improvement in working memory tasks results from switching to efficient strategies Tamar Malinovitch, Hilla Jackoby, Merav Ahissar bioRxiv 2020.05.24.113555; doi: https://doi.org/10.1101/2020.05.24.113555
59. Capacity of short-term memory in dyslexia is reduced due to less efficient utilization of items' long-term frequency Eva Kimel, Itay Lieder, Merav Ahissar bioRxiv 2020.03.25.008169; doi: https://doi.org/10.1101/2020.03.25.008169

Yoram Burak

60. A theory of joint attractor dynamics in the hippocampus and the entorhinal cortex accounts for artificial hippocampal remapping and individual grid cell field-to-field variability, Haggai Agmon, Yoram Burak 2020.03.02.974253; doi: https://doi.org/10.1101/2020.03.02.974253

THE HEBREW UNIVERSITY OF JERUSALEM

Ami Citri

61. A Claustro-Frontal Dopamine-Driven Circuit Essential For Contextual Association of Reward. Terem, Anna and Gonzales, Ben Jerry and Peretz-Rivlin, Noa and Bleistein, Noa and Reus-Garcia, Maria del Mar and Mukherjee, Diptendu and Groysman, Maya and Citri, Ami, Available at SSRN: https://ssrn.com/abstract=3569548 or http://dx.doi.org/10.2139/ssrn.3569548

Inbal Goshen

62. Features Of Hippocampal Astrocytic Domains And Their Spatial Relation To Excitatory And Inhibitory Neurons. Ron Refaeli, Adi Doron, Aviya Benmelech Chovav, Maya Groysman, Tirzah Kreisel, Yonatan Loewenstein, Inbal Goshen bioRxiv 2020.05.25.114348; doi: https://doi.org/10.1101/2020.05.25.114348

Mati Joshua

63. Passive motor learning: Oculomotor adaptation in the absence of feedback on behavioral errors Matan Cain, Mati Joshua bioRxiv 2020.05.13.095018; doi: https://doi.org/10.1101/2020.05.13.095018

Yonatan Loewenstein

64. Features Of Hippocampal Astrocytic Domains And Their Spatial Relation To Excitatory And Inhibitory Neurons Ron Refaeli, Adi Doron, Aviya Benmelech Chovav, Maya Groysman, Tirzah Kreisel, Yonatan Loewenstein, Inbal Goshen bioRxiv 2020.05.25.114348; doi: https://doi.org/10.1101/2020.05.25.114348

Aviv Mezer

65. Neurobiological underpinnings of rapid white matter plasticity during intensive reading instruction Elizabeth Huber, Aviv Mezer, Jason D. Yeatman bioRxiv 2020.05.28.122499; doi: https://doi.org/10.1101/2020.05.28.122499

Adi Mizrahi

66. KUDRYAVITSKAYA E., MAROM E., PASH D., AND MIZRAHI. A. (2020) Flexible Representations of Odour Categories in the Mouse Olfactory Bulb. bioRxiv. 2020.03.21.002006; doi: https://doi.org/10.1101/2020.03.21.002006
67. 2. CLAYTON K.K., WILLIAMSON R.S., WATANABE Y., HANCOCK K.E., TASAKA G., MIZRAHI A., HACKETT T., AND POLLEY D.B. Motor corollary discharge activates layer six circuits in the auditory cortex. bioRxiv. 2020.05.28.121459; doi: https://doi.org/10.1101/2020.05.28.121459

Israel Nelken

68. Context Sensitivity Across Multiple Time and Frequency Scales. Tamar I. Regev, Geffen Markusfeld, Leon Y. Deouell, Israel Nelken. bioRxiv 2020.06.08.141044; doi: https://doi.org/10.1101/2020.06.08.141044

69. Dense Computer Replica of Cortical Microcircuits Unravels Cellular Underpinnings of Auditory Surprise Response. Oren Amsalem, James King, Michael Reimann, Srikanth Ramaswamy, Eilif Muller, Henry Markram, Israel Nelken, Idan Segev. bioRxiv 2020.05.31.126466; doi: https://doi.org/10.1101/2020.05.31.126466

Yifat Prut

70. Motor cortical plasticity in response to skill acquisition in adult monkeys Ankur Gupta, Abdulraheem Nashef, Sharon Israely, Michal Segal, Ran Harel, Yifat Prut bioRxiv 2020.02.27.967562; doi: https://doi.org/10.1101/2020.02.27.967562

Idan Segev

71. Dense Computer Replica of Cortical Microcircuits Unravels Cellular Underpinnings of Auditory Surprise Response Oren Amsalem, James King, Michael Reimann, Srikanth Ramaswamy, Eilif Muller, Henry Markram, Israel Nelken, Idan Segev bioRxiv 2020.05.31.126466; doi: https://doi.org/10.1101/2020.05.31.126466
72. A calcium-based plasticity model predicts long-term potentiation and depression in the neocortex Giuseppe Chindemi, Marwan Abdellah, Oren Amsalem, Ruth Benavides-Piccione, Vincent Delattre, Michael Doron, Andras Ecker, James King, Pramod Kumbhar, Caitlin Monney, Rodrigo Perin, Christian Rössert, Werner Van Geit, Javier DeFelipe, Michael Graupner, Idan Segev, Henry Markram, Eilif Muller bioRxiv 2020.04.19.043117; doi: https://doi.org/10.1101/2020.04.19.043117
73. Human cortical expansion involves diversification and specialization of supragranular intratelencephalic-projecting neurons. Jim Berg, Staci A. Sorensen, Jonathan T. Ting, Jeremy A. Miller, Thomas Chartrand, Anatoly Buchin, Trygve E. Bakken, Agata Budzillo, Nick Dee, Song-Lin Ding, Nathan W. Gouwens, Rebecca D. Hodge, Brian Kalmbach, Changkyu Lee, Brian R. Lee, Lauren Alfiler, Katherine Baker, Eliza Barkan, Allison Beller, Kyla Berry, Darren Bertagnolli, Kris Bickley, Jasmine Bomben, Thomas Braun, Krissy Brouner, Tamara Casper, Peter Chong, Kirsten Crichton, Rachel Dalley, Rebecca de Frates, Tsega Desta, Samuel Dingman Lee, Florence D'Orazi, Nadezhda Dotson, Tom Egdorf, Rachel Enstrom, Colin Farrell, David Feng, Olivia Fong, Szabina Furdan, Anna A. Galakhova, Clare Gamlin, Amanda Gary, Alexandra Glandon, Jeff Goldy, Melissa Gorham, Natalia A. Goriounova, Sergey Gratiy, Lucas Graybuck, Hong Gu, Kristen Hadley, Nathan Hansen, Tim S. Heistek, Alex M. Henry, Djai B. Heyer, DiJon Hill, Chris Hill, Madie Hupp, Tim Jarsky, Sara Kebede, Lisa Keene, Lisa Kim, Mean-Hwan Kim, Matthew Kroll, Caitlin Latimer, Boaz P. Levi, Katherine E. Link, Matthew Mallory, Rusty Mann, Desiree Marshall, Michelle Maxwell, Medea McGraw, Delissa McMillen, Erica Melief, Eline J. Mertens, Leona Mezei, Norbert Mihut, Stephanie Mok, Gabor Molnar, Alice Mukora, Lindsay Ng, Kiet Ngo, Philip R. Nicovich, Julie Nyhus, Gaspar Olah, Aaron Oldre, Victoria Omstead, Attila Ozsvar, Daniel Park, Hanchuan Peng, Trangthanh Pham, Christina A. Pom, Lydia Potekhina, Ramkumar Rajanbabu, Shea Ransford, David Reid, Christine Rimorin, Augustin Ruiz, David Sandman, Josef Sulc, Susan M. Sunkin, Aaron Szafer, Viktor Szemenyei, Elliot R. Thomsen, Michael Tieu, Amy Torkelson, Jessica Trinh, Herman Tung, Wayne Wakeman, Katelyn Ward, René Wilbers, Grace Williams, Zizhen Yao, Jae-Geun Yoon, Costas Anastassiou, Anton Arkhipov, Pal Barzo, Amy Bernard, Charles Cobbs, Philip C. de Witt Hamer, Richard G. Ellenbogen, Luke Esposito, Manuel Ferreira, Ryder P. Gwinn, Michael J. Hawrylycz, Patrick R. Hof, Sander Idema, Allan R. Jones, C.Dirk Keene, Andrew L. Ko, Gabe J.

Murphy, Lydia Ng, Jeffrey G. Ojemann, Anoop P. Patel, John W. Phillips, Daniel L. Silbergeld, Kimberly Smith, Bosiljka Tasic, Rafael Yuste, Idan Segev, Christiaan P.J. de Kock, Huibert D. Mansvelder, Gabor Tamas, Hongkui Zeng, Christof Koch, Ed S. Lein bioRxiv 2020.03.31.018820; doi: https://doi.org/10.1101/2020.03.31.018820

74. Single Cortical Neurons as Deep Artificial Neural Networks David Beniaguev, Idan Segev, Michael London bioRxiv 613141; doi: https://doi.org/10.1101/613141
75. Axonal gap junctions in the fly visual system enable fast prediction for evasive flight maneuvers Siwei Wang, Alexander Borst, Idan Segev, Stephanie Palmer bioRxiv 814319; doi: https://doi.org/10.1101/814319

Haim Sompolinsky

76. Naveh, G., Ben-David, O., Sompolinsky, H., & Ringel, Z. (2020). Predicting the outputs of finite networks trained with noisy gradients. arXiv preprint arXiv:2004.01190.