

Adi Mizrahi

1. Yarden TS, **Mizrahi A**, Nelken I. Context-Dependent Inhibitory Control of Stimulus-Specific Adaptation. *J Neurosci*. 2022 Jun 8;42(23):4629-4651. doi: 10.1523/JNEUROSCI.0988-21.2022. Epub 2022 Apr 27. PMID: 35477904; PMCID: PMC9186800.

Alexander Binshtok

2. Gershon D, Negev-Goldstein RH, Abd al Razzaq L, Lev S, Katz B, **Binshtok AM**. (2022). In vivo optical recordings of ion dynamics in mouse corneal primary nociceptive terminals. *STAR Protocols*, 2022 Mar 4;3(1):101224.
3. Udasin R, Sil A, Zomot E, Achildiev H, Haj J, Engelmayer N, Lev S, **Binshtok AM**, Shaked Y, Kienzler MA, and Raz Palty. (2022). Photopharmacological modulation of native CRAC channels using azoboronate photoswitches. *PNAS*, 2022, Mar 29;119(13):e2118160119
4. Wong C, Barkai O, Wang F, Thörn Pérez C, Lev S, Cai W, Tansley S, Yousefpour N, Hooshmandi M, Lister KC, Latif M, Cuello AC, Prager-Khoutorsky M, Mogil JS, Séguéla P, De Koninck Y, Ribeiro-da-Silva A, **Binshtok AM**, Khoutorsky A. mTORC2 mediates structural plasticity in distal nociceptive endings that contributes to pain hypersensitivity following inflammation. *J Clin Invest*. 2022 May 17:e152635. doi: 10.1172/JCI152635. Epub ahead of print. PMID: 35579957. Barkai O, Rayi PR, Butterman R, Katz B, LevS, Binshtok AM. (2022). Encoding of inflammatory hyperalgesia in mice spinal cord. *PAIN*, in press

Baruch Minke

5. Gutorov R, Katz B, **Minke B**. Electrophysiological Methods for Measuring Photopigment Levels in *Drosophila* Photoreceptors. *J Vis Exp*. 2022 Jun 2;(184). doi: 10.3791/63514. PMID: 35723480.
6. Gutorov R, Katz B, Rhodes-Mordov E, Zaguri R, Brandwine-Shemmer T, **Minke B**. The Role of Membrane Lipids in Light-Activation of *Drosophila* TRP Channels. *Biomolecules*. 2022 Feb 28;12(3):382. doi: 10.3390/biom12030382. PMID: 35327573; PMCID: PMC8945425.

Chaya Kalcheim

7. Rekler D, **Kalcheim C**. Completion of neural crest cell production and emigration is regulated by retinoic-acid-dependent inhibition of BMP signaling. *Elife*. 2022 Apr 8;11:e72723. doi: 10.7554/eLife.72723. PMID: 35394423; PMCID: PMC8993216.

Ehud Zohary

8. **Zohary E**, Harari D, Ullman S, Ben-Zion I, Doron R, Attias S, Porat Y, Sklar AY, Mckyton A. Gaze following requires early visual experience. *Proc Natl Acad Sci U S A*. 2022 May 17;119(20):e2117184119. doi: 10.1073/pnas.2117184119. Epub 2022 May 12. PMID: 35549552; PMCID: PMC9171757.

Eran Meshorer

9. Sorek M, **Meshorer E**. Can't smell the virus: SARS-CoV-2, chromatin organization, and anosmia. *Dev Cell*. 2022 May 9;57(9):1081-1082. doi: 10.1016/j.devcel.2022.04.015. PMID: 35537401; PMCID: PMC9082776.

Hagai Bergman

10. Kaplan A, Mizrahi-Kliger AD, Rappel P, Iskhakova L, Fonar G, Israel Z, **Bergman H**. Spontaneous pauses in firing of external pallidum neurons are associated with exploratory behavior. *Commun Biol*. 2022 Jun 21;5(1):612. doi: 10.1038/s42003-022-03553-z. PMID: 35729350; PMCID: PMC9213498.

11. Mizrahi-Kliger AD, Feldmann LK, Kühn AA, **Bergman H**. Etiologies of insomnia in Parkinson's disease - Lessons from human studies and animal models. *Exp Neurol*. 2022 Apr;350:113976. doi: 10.1016/j.expneurol.2022.113976. Epub 2022 Jan 11. PMID: 35026228.
12. Wong JK, Deuschl G, Wolke R, **Bergman H**, Muthuraman M, Groppa S, Sheth SA, Bronte-Stewart HM, Wilkins KB, Petrucci MN, Lambert E, Kehnemouyi Y, Starr PA, Little S, Anso J, Gilron R, Poree L, Kalamangalam GP, Worrell GA, Miller KJ, Schiff ND, Butson CR, Henderson JM, Judy JW, Ramirez-Zamora A, Foote KD, Silburn PA, Li L, Oyama G, Kamo H, Sekimoto S, Hattori N, Giordano JJ, DiEuliis D, Shook JR, Dougherty DD, Widge AS, Mayberg HS, Cha J, Choi K, Heisig S, Obatusin M, Opri E, Kaufman SB, Shirvalkar P, Rozell CJ, Alagapan S, Raike RS, Bokil H, Green D, Okun MS. Proceedings of the Ninth Annual Deep Brain Stimulation Think Tank: Advances in Cutting Edge Technologies, Artificial Intelligence, Neuromodulation, Neuroethics, Pain, Interventional Psychiatry, Epilepsy, and Traumatic Brain Injury. *Front Hum Neurosci*. 2022 Mar 4;16:813387. doi: 10.3389/fnhum.2022.813387. PMID: 35308605; PMCID: PMC8931265.

Hermona Soreq

13. Zorbaz T, Madrer N, **Soreq H**. Cholinergic blockade of neuroinflammation: from tissue to RNA regulators. *Neuronal Signal*. 2022 Feb 11;6(1):NS20210035. doi: 10.1042/NS20210035. PMID: 35211331; PMCID: PMC8837817.
14. Erbacher C, Vaknine S, Moshitzky G, Lobentanzer S, Eisenberg L, Evdokimov D, Sommer C, Greenberg DS, **Soreq H**, Üçeyler N. Distinct CholinomiR Blood Cell Signature as a Potential Modulator of the Cholinergic System in Women with Fibromyalgia Syndrome. *Cells*. 2022 Apr 9;11(8):1276.

Idan Segev

15. Chindemi G, Abdellah M, Amsalem O, Benavides-Piccione R, Delattre V, Doron M, Ecker A, Jaquier AT, King J, Kumbhar P, Monney C, Perin R, Rössert C, Tuncel AM, Van Geit W, DeFelipe J, Graupner M, **Segev I**, Markram H, Muller EB. A calcium-based plasticity model for predicting long-term potentiation and depression in the neocortex. *Nat Commun*. 2022 Jun 1;13(1):3038. doi: 10.1038/s41467-022-30214-w. PMID: 35650191; PMCID: PMC9160074.
16. Shapira G, Marcus-Kalish M, Amsalem O, Van Geit W, **Segev I**, Steinberg DM. Statistical Emulation of Neural Simulators: Application to Neocortical L2/3 Large Basket Cells. *Front Big Data*. 2022 Mar 25;5:789962. doi: 10.3389/fdata.2022.789962. PMID: 35402905; PMCID: PMC8992430.
17. Dudai A, Doron M, **Segev I**, London M. Synaptic Input and ACh Modulation Regulate Dendritic Ca²⁺ Spike Duration in Pyramidal Neurons, Directly Affecting Their Somatic Output. *J Neurosci*. 2022 Feb 16;42(7):1184-1195. doi: 10.1523/JNEUROSCI.1470-21.2021. Epub 2021 Dec 10. PMID: 34893549; PMCID: PMC8883843.
18. Hunt S, Leibner Y, Mertens EJ, Barros-Zulaica N, Kanari L, Heistek TS, Karnani MM, Aardse R, Wilbers R, Heyer DB, Goriounova NA, Verhoog MB, Testa-Silva G, Obermayer J, Versluis T, Benavides-Piccione R, de Witt-Hamer P, Idema S, Noske DP, Baayen JC, Lein ES, DeFelipe J, Markram H, Mansvelder HD, Schürmann F, **Segev I**, de Kock CPJ. Strong and reliable synaptic communication between pyramidal neurons in adult human cerebral cortex. *Cereb Cortex*. 2022 Jul 8:bhac246. doi: 10.1093/cercor/bhac246. Epub ahead of print. PMID: 35802476.

Inbal Goshen

19. Refaeli R, **Goshen I**. Investigation of Spatial Interaction Between Astrocytes and Neurons in Cleared Brains. *J Vis Exp*. 2022 Mar 31;(181). doi: 10.3791/63679. PMID: 35435896.

Israel Nelken

- Yarden TS, Mizrahi A, **Nelken I**. Context-Dependent Inhibitory Control of Stimulus-Specific Adaptation. *J Neurosci*. 2022 Jun 8;42(23):4629-4651. doi: 10.1523/JNEUROSCI.0988-21.2022. Epub 2022 Apr 27. PMID: 35477904; PMCID: PMC9186800.

Leo Joskowicz

20. Beil M, Flaatten H, Guidet B, **Joskowicz L**, Jung C, de Lange D, Leaver S, Fjølner J, Szczeklik W, Sviri S, van Heerden PV. Time-dependent uncertainty of critical care transitions in very old patients - lessons for time-limited trials. *J Crit Care*. 2022 May 25;71:154067. doi: 10.1016/j.jcrc.2022.154067. Epub ahead of print. PMID: 35636347.
21. Shmueli O, Yehuda R, Szeskin A, **Joskowicz L**, Levy J. Progression of cRORA (Complete RPE and Outer Retinal Atrophy) in Dry Age-Related Macular Degeneration Measured Using SD-OCT. *Transl Vis Sci Technol*. 2022 Jan 3;11(1):19. doi: 10.1167/tvst.11.1.19. PMID: 35029632; PMCID: PMC8762698.

Mati Joshua

22. Ben-Shushan N, Shaham N, **Joshua M**, Burak Y. Fixational drift is driven by diffusive dynamics in central neural circuitry. *Nat Commun*. 2022 Mar 31;13(1):1697. doi: 10.1038/s41467-022-29201-y. PMID: 35361753; PMCID: PMC8971408.

Merav Ahissar

23. Malinovitch T, Albouy P, Zatorre RJ, **Ahissar M**. Training allows switching from limited-capacity manipulations to large-capacity perceptual processing. *Cereb Cortex*. 2022 May 3:bhac175. doi: 10.1093/cercor/bhac175. Epub ahead of print. PMID: 35511687.
24. Gertsovski A, **Ahissar M**. Reduced Learning of Sound Categories in Dyslexia Is Associated with Reduced Regularity-Induced Auditory Cortex Adaptation. *J Neurosci*. 2022 Feb 16;42(7):1328-1342. doi: 10.1523/JNEUROSCI.1533-21.2021. Epub 2021 Dec 30. PMID: 34969869; PMCID: PMC8883854.

Mickey London

- Dudai A, Doron M, Segev I, **London M**. Synaptic Input and ACh Modulation Regulate Dendritic Ca²⁺ Spike Duration in Pyramidal Neurons, Directly Affecting Their Somatic Output. *J Neurosci*. 2022 Feb 16;42(7):1184-1195. doi: 10.1523/JNEUROSCI.1470-21.2021. Epub 2021 Dec 10. PMID: 34893549; PMCID: PMC8883843.

Yifat Prut

25. Nashef A, Cohen O, Perlmutter SI, **Prut Y**. A cerebellar origin of feedforward inhibition to the motor cortex in non-human primates. *Cell Rep*. 2022 May 10;39(6):110803. doi: 10.1016/j.celrep.2022.110803. PMID: 35545040.

Yoav Adam

26. Armbruster M, Naskar S, Garcia JP, Sommer M, Kim E, **Adam Y**, Haydon PG, Boyden ES, Cohen AE, Dulla CG. Neuronal activity drives pathway-specific depolarization of peripheral astrocyte processes. *Nat Neurosci*. 2022 May;25(5):607-616. doi: 10.1038/s41593-022-01049-x. Epub 2022 Apr 28. PMID: 35484406.

Yonatan Loewenstein

27. Seiler JP, Dan O, Tüscher O, **Loewenstein Y**, Rumpel S. Experienced entropy drives choice behavior in a boring decision-making task. *Sci Rep.* 2022 Feb 24;12(1):3162. doi: 10.1038/s41598-022-06861-w. PMID: 35210465; PMCID: PMC8873446.
28. Agmon G, **Loewenstein Y**, Grodzinsky Y. Negative sentences exhibit a sustained effect in delayed verification tasks. *J Exp Psychol Learn Mem Cogn.* 2022 Jan;48(1):122-141. doi: 10.1037/xlm0001059. PMID: 35254842.

Yoram Burak

- Ben-Shushan N, Shaham N, Joshua M, **Burak Y**. Fixational drift is driven by diffusive dynamics in central neural circuitry. *Nat Commun.* 2022 Mar 31;13(1):1697. doi: 10.1038/s41467-022-29201-y. PMID: 35361753; PMCID: PMC8971408.
29. Waaga T, Agmon H, Normand VA, Nagelhus A, Gardner RJ, Moser MB, Moser EI, **Burak Y**. Grid-cell modules remain coordinated when neural activity is dissociated from external sensory cues. *Neuron.* 2022 Jun 1;110(11):1843-1856.e6. doi: 10.1016/j.neuron.2022.03.011. Epub 2022 Apr 5. PMID: 35385698; PMCID: PMC9235855.
 30. Gardner RJ, Hermansen E, Pachitariu M, **Burak Y**, Baas NA, Dunn BA, Moser MB, Moser EI. Toroidal topology of population activity in grid cells. *Nature.* 2022 Feb;602(7895):123-128. doi: 10.1038/s41586-021-04268-7. Epub 2022 Jan 12. PMID: 35022611; PMCID: PMC8810387.

Yosef Grodzinsky

- Agmon G, Loewenstein Y, **Grodzinsky Y**. Negative sentences exhibit a sustained effect in delayed verification tasks. *J Exp Psychol Learn Mem Cogn.* 2022 Jan;48(1):122-141. doi: 10.1037/xlm0001059. PMID: 35254842. Yosef Yarom