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Publications

PUBLICATIONS

- **Serotonergic neuron-glioma interactions drive high-grade glioma pathophysiology.** *bioRxiv : the preprint server for biology*
Drexler, R., Yalçın, B., Mancusi, R., Rogers, A., Shamardani, K., Woo, P. J., Ravel, A., Wu, S., Yabo, Y. A., Steger, L., de Biagi-Junior, C. A., Cascio, C. L., Malenka, et al
2025
- **Neuronal activity-dependent mechanisms of small cell lung cancer pathogenesis.** *Nature*
Savchuk, S., Gentry, K. M., Wang, W., Carleton, E., Biagi-Junior, C. A., Luthria, K., Yalçın, B., Ni, L., Farnsworth, H. C., Davis, R. A., Drexler, R., Melms, J. C., Liu, et al
2025
- **Neuroigin-3 interaction with CSPG4 regulates normal and malignant glial precursors through PIEZO1.** *bioRxiv : the preprint server for biology*
Gillespie, S. M., Seok Kim, Y., Geraghty, A. C., Yalçın, B., Mancusi, R., Hysinger, J., English Ivec, A., Reed, J., Drexler, R., Quezada, M., Malacon, K., Woo, P., Mount, et al
2025
- **Cholinergic neuronal activity promotes diffuse midline glioma growth through muscarinic signaling.** *Cell*
Drexler, R., Drinnenberg, A., Gavish, A., Yalçın, B., Shamardani, K., Rogers, A. E., Mancusi, R., Trivedi, V., Taylor, K. R., Kim, Y. S., Woo, P. J., Soni, N., Su, et al
2025
- **GABAergic neuron-to-glioma synapses in diffuse midline gliomas.** *Nature*
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2025
- **Cholinergic Neuronal Activity Promotes Diffuse Midline Glioma Growth through Muscarinic Signaling.** *bioRxiv : the preprint server for biology*
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2024
- **Myelin plasticity in the ventral tegmental area is required for opioid reward.** *Nature*
Yalçın, B., Pomrenze, M. B., Malacon, K., Drexler, R., Rogers, A. E., Shamardani, K., Chau, I. J., Taylor, K. R., Ni, L., Contreras-Esquivel, D., Malenka, R. C., Monje, M.
2024
- **Opioid drugs drive electrical insulation of reward circuitry** *NATURE*
Yalcin, B., Monje, M.
2024
- **Nf1 mutation disrupts activity-dependent oligodendroglial plasticity and motor learning in mice.** *Nature neuroscience*
Pan, Y., Hysinger, J. D., Yalçın, B., Lennon, J. J., Byun, Y. G., Raghavan, P., Schindler, N. F., Anastasaki, C., Chatterjee, J., Ni, L., Xu, H., Malacon, K., Jahan, et al
2024
- **Glioma synapses recruit mechanisms of adaptive plasticity.** *Nature*
Taylor, K. R., Barron, T., Hui, A., Spitzer, A., Yalcin, B., Ivec, A. E., Geraghty, A. C., Hartmann, G. G., Arzt, M., Gillespie, S. M., Kim, Y. S., Maleki Jahan, S., Zhang, et al

2023

- **NF1 MUTATION IN OLIGODENDROCYTE PRECURSOR CELLS INDUCES PRENEOPLASTIC LESIONS IN THE BRAIN**
Pan, Y., Hysinger, J., Yalcin, B., Lennon, J., Raghavan, P., Schindler, N., Anastasaki, C., Chatterjee, J., Mount, C., Nagaraja, S., Scheaffer, S., Attardi, L., Gutmann, et al
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- **BMAL1 loss in oligodendroglia contributes to abnormal myelination and sleep.** *Neuron*
Rojo, D., Dal Cengio, L., Badner, A., Kim, S., Sakai, N., Greene, J., Dierckx, T., Mehl, L. C., Eisinger, E., Ransom, J., Arellano-Garcia, C., Gumma, M. E., Soyk, et al
2023
- **GABAERGIC NEURON-TO-GLIOMA SYNAPSES IN DIFFUSE MIDLINE GLIOMAS**
Barron, T., Yalcin, B., Mochizuki, A., Cantor, E., Shamardani, K., Tlais, D., Franson, A., Lyons, S., Mehta, V., Jahan, S., Taylor, K., Keough, M., Xu, et al
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- **Mild respiratory COVID can cause multi-lineage neural cell and myelin dysregulation.** *Cell*
Fernández-Castañeda, A., Lu, P., Geraghty, A. C., Song, E., Lee, M. H., Wood, J., O'Dea, M. R., Dutton, S., Shamardani, K., Nwangwu, K., Mancusi, R., Yalçın, B., Taylor, et al
2022
- **NF1 mutation drives neuronal activity-dependent initiation of optic glioma.** *Nature*
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2021
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2020
- **Bespoke myelin tailored to neuron type.** *Science (New York, N.Y.)*
Yalçın, B. n., Monje, M. n.
2020; 370 (6523): 1414–15
- **Monosynaptic tracing maps brain-wide afferent oligodendrocyte precursor cell connectivity.** *eLife*
Mount, C. W., Yalcin, B., Cunliffe-Koehler, K., Sundaresh, S., Monje, M.
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- **Modeling of axonal endoplasmic reticulum network by spastic paraplegia proteins** *ELIFE*
Yalcin, B., Zhao, L., Stofanko, M., O'Sullivan, N. C., Kang, Z., Roost, A., Thomas, M. R., Zaessinger, S., Blard, O., Patto, A. L., Sohail, A., Baena, V., Terasaki, et al
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