

Thomas Yorio, PhD
Graduate School of Biomedical Sciences
North Texas Eye Research Institute
Pharmacology & Neuroscience
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Area of Expertise

Dr. Yorio's laboratory focuses on glaucoma. Areas of interest include aqueous humor dynamics, identifying potential targets for neuroprotection with an emphasis and on the role of optic nerve astrocytes in neurodegeneration. Additional studies focus on neuroprotective properties of sigma-1 receptors and in the area of glucocorticoid pharmacology and ocular hypertension, specifically on understanding the role of glucocorticoid receptor (GR) beta in dampening the ocular hypertensive response of glucocorticoids.

Qualifications

PhD in Biomedical Sciences, Mount Sinai School of Medicine
BS in Biology, Herbert Lehman College

Recent Publications

Hybrid compound sa-2 is neuroprotective in animal models of retinal ganglion cell death

Stankowska, D. L., Dibas, A., Li, L., Zhang, W., Krishnamoorthy, V. R., Chavala, S., Nguyen, T. P., Yorio, T., Ellis, D. Z. & Acharya, S., 1 Jul 2019, In : *Investigative Ophthalmology and Visual Science*. 60, 8, p. 3064-3073 10 p.

Neuroprotective Effects of Psalmotoxin-1, an Acid-Sensing Ion Channel (ASIC) Inhibitor, in Ischemia Reperfusion in Mouse Eyes

Dibas, A., Millar, J. C., Al-Farra, A. & Yorio, T., 3 Jul 2018, In : *Current Eye Research*. 43, 7, p. 921-933 13 p.

Consensus recommendations for trabecular meshwork cell isolation, characterization and culture

Keller, K. E., Bhattacharya, S. K., Borrás, T., Brunner, T. M., Chansangpetch, S., Clark, A., Dismuke, W. M., Du, Y., Elliott, M. H., Ethier, C. R., Faralli, J. A., Freddo, T. F., Fuchshofer, R., Giovingo, M., Gong, H., Gonzalez, P., Huang, A., Johnstone, M. A., Kaufman, P. L., Kelley, M. J. & 37 others, Knepper, P. A., Kopczynski, C. C., Kuchtey, J. G., Kuchtey, R. W., Kuehn, M. H., Lieberman, R. L., Lin, S. C., Liton, P., Liu, Y., Lütjen-Drecoll, E., Mao, W., Masis-Solano, M., McDonnell, F., McDowell, C. M., Overby, D. R., Pattabiraman, P. P., Raghunathan, V. K., Rao, P. V., Rhee, D. J., Chowdhury, U. R., Russell, P., Samples, J. R., Schwartz, D., Stubbs, E. B., Tamm, E. R., Tan, J. C., Toris, C. B., Torrejon, K. Y., Vranka, J. A., Wirtz, M. K., Yorio, T., Zhang, J., Zode, G., Fautsch, M. P., Peters, D. M., Acott, T. S. & Stamer, W. D. , 1 Jun 2018, In : *Experimental eye research*. 171, p. 164-173 10 p.

Targets of neuroprotection in glaucoma

He, S., Stankowska, D. L., Ellis, D. Z., Krishnamoorthy, R. & Yorio, T., 1 Jan 2018, In : *Journal of Ocular Pharmacology and Therapeutics*. 34, 1-2, p. 85-106 22 p.

A feed-forward regulation of endothelin receptors by c-Jun in human non-pigmented ciliary epithelial cells and retinal ganglion cells

Wang, J., Ma, H. Y., Krishnamoorthy, R., Yorio, T. & He, S., 1 Sep 2017, In : *PLoS ONE*. 12, 9, e0185390.

Sigma-1 receptor regulates mitochondrial function in glucose- and oxygen-deprived retinal ganglion cells

Ellis, D. Z., Li, L., Park, Y., He, S., Mueller, B. & Yorio, T., 1 May 2017, In : *Investigative Ophthalmology and Visual Science*. 58, 5, p. 2755-2764 10 p.

Principles of ocular pharmacology

Park, Y., Ellis, D. Z., Mueller, B., Stankowska, D. L. & Yorio, T., 1 Jan 2017, *Handbook of Experimental Pharmacology*. Springer New York LLC, p. 3-30 28 p. (Handbook of Experimental Pharmacology; vol. 242).

Design and synthesis of novel hybrid sydnonimine and prodrug useful for glaucomatous optic neuropathy

Acharya, S., Rogers, P., Krishnamoorthy, R., Stankowska, D. L., Dias, H. V. R. & Yorio, T., 1 Mar 2016, In : Bioorganic and Medicinal Chemistry Letters. 26, 5, p. 1490-1494 5 p.

Involvement of ampa receptor and its flip and flop isoforms in retinal ganglion cell death following oxygen/glucose deprivation

Park, Y. H., Broyles, H. V., He, S., McGrady, N. R., Li, L. & Yorio, T., 1 Feb 2016, In : Investigative Ophthalmology and Visual Science. 57, 2, p. 508-526 19 p.

Glucocorticoid therapy and ocular hypertension

Dibas, A. & Yorio, T., 1 Jan 2016, In : European Journal of Pharmacology. 787, p. 57-71 15 p.

Sponsored Projects

Characterizing the Neuroprotective Role of AMPA Receptors in Purified Retinal Ganglion Cells

Yorio, T.

Sigma Xi

3/05/13 → 3/05/14

Glucocorticoids, Ocular Hypertension, and Glaucoma

Yorio, T. & Clark, A.

NEI: National Eye Institute

1/03/12 → 28/02/17

Glucocorticoids, Ocular Hypertension, and Glaucoma

Clark, A. & Yorio, T.

NEI: National Eye Institute

1/03/12 → 28/02/17

Neuroprotection Role of Ampakine in Primary Retinal Ganglion Cells - Graduate Student, Yong Park

Yorio, T.

Sigma Xi

1/05/11 → 30/04/12

Neuroprotective Properties of Sigma 1 Receptors - Graduate Student, Brett Mueller

Yorio, T.

Sigma Xi

1/05/11 → 30/04/12

Role of Astrocytes in Glaucoma (For: Heather Broyles)

Yorio, T.

Intramural Research(UNTHSC)

15/10/15 → 15/02/16

Vision Integrating Strategies in Ophthalmology and Neurochemistry (VISION) - Core

Yorio, T. & Clark, A.

Department of the Army

22/01/10 → 21/02/15

Vision Integrating Strategies in Ophthalmology and Neurochemistry (VISION) - Project 1

Yorio, T. & Clark, A.

Department of the Army

22/01/10 → 21/02/15

Vision Integrating Strategies in Ophthalmology and Neurochemistry (VISION) - Project 4

Krishnamoorthy, R., Yorio, T. & Clark, A.

Department of the Army
22/01/10 → 21/02/15

Vision Integrating Strategies in Ophthalmology and Neurochemistry (VISION) - Project 5

Clark, A. & Yorio, T.
Department of the Army
22/01/10 → 21/02/15

Vision Integrating Strategies in Ophthalmology and Neurochemistry (VISION) - Project 6

Clark, A. & Yorio, T.
Department of the Army
22/01/10 → 21/02/15