Publications:

Domingues HS, Urbanski MM, Macedo-Ribeiro S, Almaktari A, Irfan A, Hernandez Y, Wang H, Relvas JB, Rubinstein B, Melendez-Vasquez CV, Pinto IM. (2020) Pushing myelination - developmental regulation of myosin expression drives oligodendrocyte morphological differentiation. J Cell Sci. Aug 5;133(15):jcs232264. doi: 10.1242/jcs.232264. PMID: 32620697

Urbanski MM, Brendel M, Melendez-Vasquez, C.V. (2019). Mechanical properties of demyelinated CNS lesions: increased tissue stiffness in chronic demyelination. Sci Rep 9(1):999. doi: 10.1038/s41598-018-37745-7. PMID: 30700777

Berger,S.L., Leo-Macias, A., Yuen, S., Khatri, L., Pfennig, S., Zhang, Y., Agullo-Pascual, E., Caillol, G., Zhu, M., Rothenberg, E., Melendez-Vasquez, C.V., Delmar, M., Leterrier, C., Salzer J.L. (2018) Localized Myosin II Activity Regulates Assembly and Plasticity of the Axon Initial Neuron 97(3):555-570.e6. doi: 10.1016/j.neuron.2017.12.039 PMID:29395909. Cited 11

Urbanski MM, Kingsbury L, Moussouros D, Kassim I, Mehjabeen S, Paknejad N., Melendez-Vasquez CV. Myelinating glia differentiation is regulated by extracellular matrix elasticity. (2016) Sci Rep. Sep 20;6:33751. doi: 10.1038/srep33751. PMID: 27646171.

Lim, H., Sharoukhov, D*., Kassim, I*., Zhang, Y., Salzer, J.L., Melendez-Vasquez, C.V. (2014) Label-free imaging of Schwann cell myelination by third harmonic generation microscopy. Proc Natl Acad Sci. 111(50):18025-30. doi: 10.1073/pnas.1417820111. Epub 2014 Dec 1.

Rusielewicz T*, Nam J*, Damanakis E*, John GR, Raine CS, Melendez-Vasquez CV. (2014). Accelerated repair of demyelinated CNS lesions in the absence of non-muscle myosin IIB. Glia. Apr;62(4):580-91. doi: 10.1002/glia.22627. Epub 2014 Jan 28. PMID: 24470341.

Dutta D, Zameer A, Mariani JN, Zhang J, Asp L, Huynh J, Mahase S, Laitman BM, Argaw AT, Melendez-Vasquez CV, Casaccia P, Hayot F, Bottinger EP, Brown CW and GR John. (2014) Combinatorial actions of Tgfβ and Activin ligands promote oligodendrocyte development and CNS myelination. Development (12):2414-28. doi: 10.1242/dev.10649

Wang, H., Rusielewicz T*., Leitman, A*, Tewari, A., Einhenber, Steve Melendez-Vasquez C.V. (2012) Myosin IIB is a negative regulator of oligodendrocyte differentiation. J Neurosci Res 90:1547-1556. PMID: 22437915.

Leitman E*., Tewari A., Horn, M*., Urbanski M*., Damanakis, E*., Einheber S., Salzer J., de Lanerolle P., Melendez-Vasquez, C.V. (2011) MLCK regulates Schwann cell cytoskeletal organization, differentiation and myelination. J Cell Sci 124: 3784-96. PMID: 22100921.

Zhang J, Kramer E, Asp L, Dutta D, Navrazhina K, Pham T, Mariani J, Argaw A, Melendez-Vasquez C.V., John GR. Promoting myelin repair and return of function in multiple sclerosis (2011). FEBS Letters 585:3813-20. PMID: 21864535.

He, Y, Kim JY, Dupree J, Tewari A, Melendez-Vasquez, C.V., Svaren J, Cassacia, P (2010) Yy1: a molecular link between neuregulin and transcriptional regulation of peripheral myelination. Nat Neurosci 2010 13:1472-80. PMID: 21864535.

Wang, H., Tewari A., Einheber S., Salzer J., Melendez-Vasquez, C.V. (2008) Myosin II has distinct roles during PNS and CNS myelin sheath formation. J Cell Biol 182:1171-84. PMID: 18794332.

Melendez -Vasquez, C.V., Einheber S., Salzer J.L (2004) Rho kinase regulates Schwann cell myelination and formation of associated axonal domains. J.Neurosci. 24:3953-3963. PMID: 15102911.

Zhang Y., Taveggia C., Melendez-Vasquez, C.V., Einheber S., Raine C S., Salzer J L., Brosnan C F, Gareth R. John (2006) Interleukin-11 potentiates oligodendrocyte survival and maturation, and myelin formation J.Neurosci 26: 12174-12185. PMID: 17122042.

Melendez-Vasquez, C.V., Carey D., Zanazzi, G., Reizes, O., Maurel P., Salzer J.L. (2005) Differential expression of proteoglycans at central and peripheral Nodes of Ranvier Glia 52:301-308. PMID: 16035076. Cited:52

John GR, Chen L, Rivieccio MA, Melendez-Vasquez C.V., Hartley A, Brosnan CF.(2004) Interleukin-1beta induces a reactive astroglial phenotype via deactivation of the Rho GTPase-Rock axis. J Neurosci. 24:2837-2845. PMID: 15028778.

Melendez-Vasquez, C.V., Rios, J.C., Zanazzi, G., Lambert, S., Bretscher, A., Salzer, J. (2001) Nodes of Ranvier form in association with ERM (ezrin-radixin-moesin)-positive Schwann cell processes. Proc. Natl. Acad. Sci. 98:1235-1240. PMID: 11158623.

Rios, J.C.*, Melendez -Vasquez, C.V*., Einheber, S., Lustig,M., Grumet, M., Gollan, L., Peles, E., Hemperly, J.J., Salzer, J.L. (2000) Caspr and contactin co-localize in the paranodal and internodal membranes of myelinated axons. J. Neurosci 20: 8354-8364. (*equal contribution). PMID: 11069942.

Melendez -Vasquez, C.V. & Gregson N.A. (1998) Characterization and partial purification of a novel 36 kDa peripheral myelin protein recognized by the sera of patients with neurological disorders. J. Neuroimmunol 91:10-18. PMID: 9846814.

Gonzalez, L.E., Melendez-Vasquez, C.V. , Gregson, N. & File, S.E. (1998) A rat model of spontaneous myopathy and malignant hyperthermia. Am J Pathol 152: 1099-1103. PMID: 9546371. Cited:3

Melendez -Vasquez, C.V., Redford, J., Choudhary, PP., Gray, I., Maitland, P., Gregson,N., Smith, K. & Hughes, R. (1997) Immunological investigation of chronic inflammatory demyelinating polyradiculoneuropathy. J. Neuroimmunol 73: 124-134. PMID: 9058768.

Book Chapter

Urbanski M., & Melendez-Vasquez C.V (2018). Preparation of Matrices of Variable Stiffness for the Study of Mechanotransduction in Schwann Cell Development. Methods in Molecular Biology: Schwann cells. Edited by Haesun Kim & Paula Monje. Springer.doi: 10.1007/978-1-4939-7649-2_18

1. Urbanski MM, Brendel M, Melendez-Vasquez, CV Mechanical properties of demyelinated CNS lesions: increased tissue stiffness in chronic demyelination (2019) Sci Rep 9(1):999. doi: 10.1038/s41598-018-37745-7. PMID: 30700777 2. Urbanski MM, Melendez-Vasquez CV. (2018) Preparation of Matrices of Variable Stiffness for the Study of Mechanotransduction in Schwann Cell Development; Methods in Molecular Biology p.282-297. Monje PV, Kim HA, editors. New York: Springer; 2018

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