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Publikationen

Microglia are essential for tissue contraction in wound closure after brain injury in zebrafish larvae
El-Daher, F., Enos, S. J., Drake, L. K., Wehner, D., Westphal, M., Porter, N. J., Becker, C. G., & 1 weitereBecker, T., Jan. 2025, in: Life science alliance. 8, 1, 20 S., e202403052.

C9ORF72 Deficiency Results in Neurodegeneration in the Zebrafish Retina
Jaroszynska, N., Salzinger, A., Tsarouchas, T. M., Becker, C. G., Becker, T., Lyons, D. A., MacDonald, R. B., & 1 weitere Keatinge, M., 19 Juni 2024, in: Journal of Neuroscience. 44, 25, e2128232024.

Drug screening in zebrafish larvae reveals inflammation-related modulators of secondary damage after spinal cord injury in mice
Oprișoreanu, A. M., Ryan, F., Richmond, C., Dzekhtsiarova, Y., Carragher, N. O., Becker, T., David, S., & 1 weitere Becker, C. G., 2023, in: Theranostics. 13, 8, S. 2531-2551 21 S.

Rapid Testing of Gene Function in Axonal Regeneration After Spinal Cord Injury Using Larval Zebrafish
Drake, L. K., Keatinge, M., Tsarouchas, T. M., Becker, C. G., Lyons, D. A. & Becker, T., 2023, *Axon Regeneration: Methods and Protocols.* Udvadia, A. J. & Antczak, J. B. (Hrsg.). Humana Press, S. 263-277 15 S. (Methods in Molecular Biology, Band 2636).

Targeting phosphoglycerate kinase 1 with terazosin improves motor neuron phenotypes in multiple models of amyotrophic lateral sclerosis
Chaytow, H., Carroll, E., Gordon, D., Huang, Y-T., van der Hoorn, D., Smith, H. L., Becker, T., & 4 weitereBecker, C. G., Faller, K. M. E., Talbot, K. & Gillingwater, T. H., Sept. 2022, in: EBioMedicine. 83, 83, S. 104202 104202.

Regenerative neurogenesis: the integration of developmental, physiological and immune signals
Becker, T. & Becker, C. G., 15 Apr. 2022, in: Development (Cambridge, England). 149, 8, S. 1-13 13 S.

An exception to the rule? Regeneration of the injured spinal cord in the spiny mouse
Wehner, D. & Becker, C. G., 28 Feb. 2022, in: Developmental cell. 57, 4, S. 415-416 2 S.

Controlled Semi-Automated Lased-Induced Injuries for Studying Spinal Cord Regeneration in Zebrafish Larvae
El-Daher, F., Early, J. J., Richmond, C. E., Jamieson, R., Becker, T. & Becker, C. G., 22 Nov. 2021, in: Journal of visualized experiments : JoVE. 2021, 177, e63259.

Truly-Biocompatible Gold Catalysis Enables Vivo-Orthogonal Intra-CNS Release of Anxiolytics
Ortega-Liebana, M. C., Porter, N. J., Adam, C., Valero, T., Hamilton, L., Sieger, D., Becker, C. G., & 1 weitereUnciti-Broceta, A., 3 Nov. 2021, in: Angewandte Chemie. 134, 1

A unique macrophage subpopulation signals directly to progenitor cells to promote regenerative neurogenesis in the zebrafish spinal cord
Cavone, L., McCann, T., Drake, L. K., Aguzzi, E. A., Oprișoreanu, A. M., Pedersen, E., Sandi, S., & 10 weitereSelvarajah, J., Tsarouchas, T. M., Wehner, D., Keatinge, M., Mysiak, K. S., Henderson, B. E. P., Dobie, R., Henderson, N. C., Becker, T. & Becker, C. G., 7 Juni 2021, in: Developmental cell. 56, 11, S. 1617-1630.e6

CRISPR gRNA phenotypic screening in zebrafish reveals pro-regenerative genes in spinal cord injury
Keatinge, M., Tsarouchas, T. M., Munir, T., Porter, N. J., Larraz, J., Gianni, D., Tsai, H. H., & 3 weitereBecker, C. G., Lyons, D. A. & Becker, T., 29 Apr. 2021, in: PLOS genetics. 17, 4, e1009515.

Automated in vivo drug screen in zebrafish identifies synapsestabilising drugs with relevance to spinal muscular atrophy
Oprișoreanu, A. M., Smith, H. L., Krix, S., Chaytow, H., Carragher, N. O., Gillingwater, T. H., Becker, C. G., & 1 weitere Becker, T., Apr. 2021, in: DMM Disease Models and Mechanisms. 14, 4, dmm.047761.

Coaxing stem cells to repair the spinal cord
Becker, C. & Becker, T., 2 Okt. 2020, in: Science. 370, 6512, S. 36-37

Neural circuit reorganisation after spinal cord injury in zebrafish
El-Daher, F. & Becker, C. G., Okt. 2020, in: Current opinion in genetics & development : reviews of all advances ; evaluation of key references ; comprehensive listing of papers. 64, S. 44-51 8 S.

Editorial overview: Regeneration
Becker, C. G., Becker, T. & Wu, J. C., Apr. 2020, in: Current Opinion in Physiology. 14, S. iii-v

Dynamic cell interactions allow spinal cord regeneration in zebrafish
Becker, T. & Becker, C. G., 4 Feb. 2020, in: Current Opinion in Physiology. 14, S. 64-69 6 S.

Interaction of Axonal Chondrolectin with Collagen XIXa1 Is Necessary for Precise Neuromuscular Junction Formation
Oprișoreanu, A. M., Smith, H. L., Arya, S., Webster, R., Zhong, Z., Wehner, D., Cardozo, M. J., & 4 weitereEaton-Hart, C., Becker, T., Talbot, K. & Becker, C. G., 29 Okt. 2019, in: Cell reports. 29, 5, S. 1082-1098.e10 17 S.

Regeneration of dopaminergic neurons in adult zebrafish depends on immune system activation and differs for distinct populations
Caldwell, L. J., Davies, N. O., Cavone, L., Mysiak, K. S., Semenova, S. A., Panula, P., Armstrong, J. D., & 2 weitere Becker, C. G. & Becker, T., 12 Juni 2019, in: Journal of Neuroscience. 39, 24, S. 4694-4713 20 S.

Dynamic control of proinflammatory cytokines Il-1β and Tnf-α by macrophages in zebrafish spinal cord regeneration
Tsarouchas, T. M., Wehner, D., Cavone, L., Munir, T., Keatinge, M., Lambertus, M., Underhill, A., & 7 weitereBarrett, T., Kassapis, E., Ogryzko, N., Feng, Y., van Ham, T. J., Becker, T. & Becker, C. G., 7 Nov. 2018, in: Nature communications. 9, 1, 4670.

The spinal ependymal zone as a source of endogenous repair cells across vertebrates
Becker, C. G., Becker, T. & Hugnot, J. P., Nov. 2018, in: Progress in neurobiology : an international review journal. 170, S. 67-80 14 S.

A synthetic cell permeable antioxidant protects neurons against acute oxidative stress
Drummond, N. J., Davies, N. O., Lovett, J. E., Miller, M. R., Cook, G., Becker, T., Becker, C. G., & 2 weitereMcPhail, D. B. & Kunath, T., 1 Dez. 2017, in: Scientific reports. 7, 1, 11857.

Reduce, reuse, recycle – Developmental signals in spinal cord regeneration
Cardozo, M. J., Mysiak, K. S., Becker, T. & Becker, C. G., 1 Dez. 2017, in: Developmental biology. 432, 1, S. 53-62 10 S.

Restoration of anatomical continuity after spinal cord transection depends on Wnt/β-catenin signaling in larval zebrafish
Wehner, D., Becker, T. & Becker, C. G., 4 Nov. 2017, in: Data in brief. 16, S. 65-70 6 S.

Therapeutic strategies for spinal muscular atrophy: SMN and beyond
Bowerman, M., Becker, C. G., Yáñez-Muñoz, R. J., Ning, K., Wood, M. J. A., Gillingwater, T. H. & Talbot, K., 1 Aug. 2017, in: DMM Disease Models and Mechanisms. 10, 8, S. 943-954 12 S.

Wnt signaling controls pro-regenerative Collagen XII in functional spinal cord regeneration in zebrafish
Wehner, D., Tsarouchas, T. M., Michael, A., Haase, C., Weidinger, G., Reimer, M. M., Becker, T., & 1 weitereBecker, C. G., 25 Juli 2017, in: Nature communications. 8, 1, 126.

Bioenergetic status modulates motor neuron vulnerability and pathogenesis in a zebrafish model of spinal muscular atrophy
Boyd, P. J., Tu, W. Y., Shorrock, H. K., Groen, E. J. N., Carter, R. N., Powis, R. A., Thomson, S. R., & 10 weitere Thomson, D., Graham, L. C., Motyl, A. A. L., Wishart, T. M., Highley, J. R., Morton, N. M., Becker, T., Becker, C. G., Heath, P. R. & Gillingwater, T. H., Apr. 2017, in: PLOS genetics. 13, 4, e1006744.

Systemic restoration of UBA1 ameliorates disease in spinal muscular atrophy
Powis, R. A., Karyka, E., Boyd, P., Côme, J., Jones, R. A., Zheng, Y., Szunyogova, E., & 9 weitereGroen, E. J. N., Hunter, G., Thomson, D., Wishart, T. M., Becker, C. G., Parson, S. H., Martinat, C., Azzouz, M. & Gillingwater, T. H., 1 Juli 2016, in: JCI insight. 1, 11, e87908.

Spinal motor neurons are regenerated after mechanical lesion and genetic ablation in larval zebrafish
Ohnmacht, J., Yang, Y., Maurer, G. W., Barreiro-Iglesias, A., Tsarouchas, T. M., Wehner, D., Sieger, D., & 2 weitere Becker, C. G. & Becker, T., Mai 2016, in: Development (Cambridge). 143, 9, S. 1464-1474 11 S.

Serotonin Promotes Development and Regeneration of Spinal Motor Neurons in Zebrafish
Barreiro-Iglesias, A., Mysiak, K. S., Scott, A. L., Reimer, M. M., Yang, Y., Becker, C. G. & Becker, T., 3 Nov. 2015, in: Cell reports. 13, 5, S. 924-932 9 S.

Neuronal Regeneration from Ependymo-Radial Glial Cells: Cook, Little Pot, Cook!
Becker, C. G. & Becker, T., 23 Feb. 2015, in: Developmental cell. 32, 4, S. 516-527 12 S.

Neural development and regeneration: It’s all in your spinal cord
Becker, C. G. & Del Corral, R. D., 2015, in: Development (Cambridge). 142, 5, S. 811-816 6 S.

Dysregulation of ubiquitin homeostasis and β-catenin signaling promote spinal muscular atrophy
Wishart, T. M., Mutsaers, C. A., Riessland, M., Reimer, M. M., Hunter, G., Hannam, M. L., Eaton, S. L., & 17 weitere Fuller, H. R., Roche, S. L., Somers, E., Morse, R., Young, P. J., Lamont, D. J., Hammerschmidt, M., Joshi, A., Hohenstein, P., Morris, G. E., Parson, S. H., Skehel, P. A., Becker, T., Robinson, I. M., Becker, C. G., Wirth, B. & Gillingwater, T. H., 3 März 2014, in: Journal of Clinical Investigation. 124, 4, S. 1821-1834 14 S.

Chondrolectin affects cell survival and neuronal outgrowth in in vitro and in vivo models of spinal muscular atrophy
Sleigh, J. N., Barreiro-Iglesias, A., Oliver, P. L., Biba, A., Becker, T., Davies, K. E., Becker, C. G., & 1 weitereTalbot, K., Feb. 2014, in: Human molecular genetics. 23, 4, S. 855-869 15 S.

Zebrafish regenerate full thickness optic nerve myelin after demyelination, but this fails with increasing age
Münzel, E. J., Becker, C. G., Becker, T. & Williams, A., 27 Jan. 2014, in: Acta neuropathologica communications. 2, 1, 77.

Axonal regeneration in zebrafish
Becker, T. & Becker, C. G., 2014, in: Current opinion in neurobiology : reviews of all advances ; evaluation of key references ; comprehensive listing of papers. 27, S. 186-191 6 S.

Dopamine from the Brain Promotes Spinal Motor Neuron Generation during Development and Adult Regeneration
Reimer, M. M., Norris, A., Ohnmacht, J., Patani, R., Zhong, Z., Dias, T. B., Kuscha, V., & 11 weitereScott, A. L., Chen, Y. C., Rozov, S., Frazer, S. L., Wyatt, C., Higashijima, S. I., Patton, E. E., Panula, P., Chandran, S., Becker, T. & Becker, C. G., 10 Juni 2013, in: Developmental cell. 25, 5, S. 478-491 14 S.

Distribution of glycinergic neurons in the brain of glycine transporter-2 transgenic Tg(glyt2:Gfp) adult zebrafish: Relationship to brain-spinal descending systems
Barreiro-Iglesias, A., Mysiak, K. S., Adrio, F., Rodicio, M. C., Becker, C. G., Becker, T. & Anadón, R., 1 Feb. 2013, in: Journal of Comparative Neurology. 521, 2, S. 389-425 37 S.

Lesion-induced generation of interneuron cell types in specific dorsoventral domains in the spinal cord of adult zebrafish
Kuscha, V., Frazer, S. L., Dias, T. B., Hibi, M., Becker, T. & Becker, C. G., 1 Nov. 2012, in: Journal of Comparative Neurology. 520, 16, S. 3604-3616 13 S.

Plasticity of tyrosine hydroxylase and serotonergic systems in the regenerating spinal cord of adult zebrafish
Kuscha, V., Barreiro-Iglesias, A., Becker, C. G. & Becker, T., 1 Apr. 2012, in: Journal of Comparative Neurology. 520, 5, S. 933-951 19 S.

Chondrolectin mediates growth cone interactions of motor axons with an intermediate target
Zhong, Z., Ohnmacht, J., Reimer, M. M., Bach, I., Becker, T. & Becker, C. G., 28 März 2012, in: Journal of Neuroscience. 32, 13, S. 4426-4439 14 S.

Notch signaling controls generation of motor neurons in the lesioned spinal cord of adult zebrafish
Dias, T. B., Yang, Y. J., Ogai, K., Becker, T. & Becker, C. G., 29 Feb. 2012, in: Journal of Neuroscience. 32, 9, S. 3245-3252 8 S.

Claudin k is specifically expressed in cells that form myelin during development of the nervous system and regeneration of the optic nerve in adult zebrafish
Münzel, E. J., Schaefer, K., Obirei, B., Kremmer, E., Burton, E. A., Kuscha, V., Becker, C. G., & 3 weitereBrösamle, C., Williams, A. & Becker, T., Feb. 2012, in: GLIA. 60, 2, S. 253-270 18 S.

SSDP cofactors regulate neural patterning and differentiation of specific axonal projections
Zhong, Z., Ma, H., Taniguchi-Ishigaki, N., Nagarajan, L., Becker, C. G., Bach, I. & Becker, T., 5 Nov. 2010, in: Developmental biology. 349, 2, S. 213-224 12 S.

Analysis of the astray/robo2 zebrafish mutant reveals that degenerating tracts do not provide strong guidance cues for regenerating optic axons
Wyatt, C., Ebert, A., Reimer, M. M., Rasband, K., Hardy, M., Chien, C. B., Becker, T., & 1 weitereBecker, C. G., 13 Okt. 2010, in: Journal of Neuroscience. 30, 41, S. 13838-13849 12 S.

Developmentally Regulated Impediments to Skin Reinnervation by Injured Peripheral Sensory Axon Terminals
O'Brien, G. S., Martin, S. M., Söllner, C., Wright, G. J., Becker, C. G., Portera-Cailliau, C. & Sagasti, A., 29 Dez. 2009, in: Current biology. 19, 24, S. 2086-2090 5 S.

Sonic hedgehog is a polarized signal for motor neuron regeneration in adult zebrafish
Reimer, M. M., Kuscha, V., Wyatt, C., Sörensen, I., Frank, R. E., Knüwer, M., Becker, T., & 1 weitereBecker, C. G., 2 Dez. 2009, in: Journal of Neuroscience. 29, 48, S. 15073-15082 10 S.

Motor neuron regeneration in adult zebrafish
Reimer, M. M., Sörensen, I., Kuscha, V., Frank, R. E., Liu, C., Becker, C. G. & Becker, T., 20 Aug. 2008, in: Journal of Neuroscience. 28, 34, S. 8510-8516 7 S.

Adult zebrafish as a model for successful central nervous system regeneration
Becker, C. G. & Becker, T., 2008, in: Restorative Neurology and Neuroscience. 26, 2-3, S. 71-80 10 S.

Proteasomal selection of multiprotein complexes recruited by LIM homeodomain transcription factors
Güngör, C., Taniguchi-Ishigaki, N., Ma, H., Drung, A., Tursun, B., Ostendorff, H. P., Bossenz, M., & 3 weitereBecker, C. G. , Becker, T. & Bach, I., 18 Sept. 2007, in: Proceedings of the National Academy of Sciences of the United States of America : PNAS. 104, 38, S. 15000-15005 6 S.

Semaphorin3D regulates axon-axon interactions by modulating levels of L1 cell adhesion molecule
Wolman, M. A., Regnery, A. M., Becker, T., Becker, C. G. & Halloran, M. C., 5 Sept. 2007, in: Journal of Neuroscience. 27 , 36, S. 9653-9663 11 S.

Growth and pathfinding of regenerating axons in the optic projection of adult fish
Becker, C. G. & Becker, T., Sept. 2007, in: Journal of neuroscience research. 85, 12, S. 2793-2799 7 S.

Contactin1a expression is associated with oligodendrocyte differentiation and axonal regeneration in the central nervous system of zebrafish
Schweitzer, J., Gimnopoulos, D., Lieberoth, B. C., Pogoda, H. M., Feldner, J., Ebert, A., Schachner, M., & 2 weitere Becker, T. & Becker, C. G., Juni 2007, in: Molecular and Cellular Neuroscience. 35, 2, S. 194-207 14 S.

PlexinA3 restricts spinal exit points and branching of trunk motor nerves in embryonic zebrafish
Feldner, J., Reimer, M. M., Schweitzer, J., Wendik, B., Meyer, D., Becker, T. & Becker, C. G., 2 Mai 2007, in: Journal of Neuroscience. 27, 18, S. 4978-4983 6 S.

Model Organisms in Spinal Cord Regeneration
Becker, C. G. & Becker, T., 5 Feb. 2007, Wiley & Sons, Chichester [u. a.]. 400 S.

Zebrafish as a Model System for Successful Spinal Cord Regeneration
Becker, C. G. & Becker, T., 5 Feb. 2007, *Model Organisms in Spinal Cord Regeneration.* Wiley & Sons, Chichester [u. a.], S. 289-319 31 S.

Neuropilin-1a is involved in trunk motor axon outgrowth in embryonic zebrafish
Feldner, J., Becker, T., Goishi, K., Schweitzer, J., Lee, P., Schachner, M., Klagsbrun, M., & 1 weitereBecker, C. G., Nov. 2005, in: Developmental Dynamics. 234, 3, S. 535-549 15 S.

Tenascin-C is involved in motor axon outgrowth in the trunk of developing zebrafish
Schweitzer, J., Becker, T., Lefebvre, J., Granato, M., Schachner, M. & Becker, C. G., Nov. 2005, in: Developmental Dynamics. 234, 3, S. 550-566 17 S.

Differences in the regenerative response of neuronal cell populations and indications for plasticity in intraspinal neurons after spinal cord transection in adult zebrafish
Becker, T., Lieberoth, B. C., Becker, C. G. & Schachner, M., Okt. 2005, in: Molecular and Cellular Neuroscience. 30, 2, S. 265-278 14 S.

Expression of collapsin response mediator proteins in the nervous system of embryonic zebrafish
Schweitzer, J., Becker, C. G., Schachner, M. & Becker, T., Aug. 2005, in: Gene Expression Patterns. 5, 6, S. 809-816 8 S.

L1.1 is involved in spinal cord regeneration in adult zebrafish
Becker, C. G., Lieberoth, B. C., Morellini, F., Feldner, J., Becker, T. & Schachner, M., 8 Sept. 2004, in: Journal of Neuroscience. 24, 36, S. 7837-7842 6 S.

Expression and mapping of duplicate neuropili-1 and neuropilin-2 genes in developing zebrafish
Bovenkamp, D. E., Goishi, K., Bahary, N., Davidson, A. J., Zhou, Y., Becker, T., Becker, C. G., & 2 weitereZon, L. I. & Klagsbrun, M., Juli 2004, in: Gene Expression Patterns. 4, 4, S. 361-370 10 S.

Tenascin-R as a repellent guidance molecule for newly growing and regenerating optic axons in adult zebrafish
Becker, C. G., Schweitzer, J., Feldner, J., Schachner, M. & Becker, T., Juli 2004, in: Molecular and Cellular Neuroscience. 26, 3, S. 376-389 14 S.

Tenascin-R as a repellent guidance molecule for developing optic axons in zebrafish
Becker, C. G., Schweitzer, J., Feldner, J., Becker, T. & Schachner, M., 16 Juli 2003, in: Journal of Neuroscience. 23, 15, S. 6232-6237 6 S.

Integrin antagonists affect growth and pathfinding of ventral motor nerves in the trunk of embryonic zebrafish
Becker, T., McLane, M. A. & Becker, C. G., 1 Mai 2003, in: Molecular and Cellular Neuroscience. 23, 1, S. 54-68 15 S.

Expression of protein zero is increased in lesioned axon pathways in the central nervous system of adult zebrafish
Schweitzer, J., Becker, T., Becker, C. G. & Schachner, M., 1 Feb. 2003, in: GLIA. 41, 3, S. 301-317 17 S.

Comparing protein stabilities during zebrafish embryogenesis
Becker, T., Bossenz, M., Tursun, B., Schlüter, A., Peters, M. A., Becker, C. G., Ostendorff, H. P., & 1 weitereBach, I., 2003 , in: Methods in cell science : an official journal of the Society for In Vitro Biology. 25, 1-2, S. 85-89 5 S.

Double labeling of neurons by retrograde axonal tracing and non-radioactive in situ hybridization in the CNS of adult zebrafish
Lieberoth, B. C., Becker, C. G. & Becker, T., 2003, in: Methods in cell science : an official journal of the Society for In Vitro Biology. 25, 1-2, S. 65-70 6 S.

Expression of the zebrafish recognition molecule F3/F11/contactin in a subset of differentiating neurons is regulated by cofactors associated with LIM domains
Gimnopoulos, D., Becker, C. G., Ostendorff, H. P., Bach, I., Schachner, M. & Becker, T., Dez. 2002, in: Mechanisms of Development. 119, SUPPL. 1, S. S135-S141

RETRACTED: Expression of the zebrafish recognition molecule F3/F11/contactin in a subset of differentiating neurons is regulated by cofactors associated with LIM domains
Gimnopoulos, D., Becker, C. G., Ostendorff, H. P., Bach, I., Schachner, M. & Becker, T., Nov. 2002, in: Gene Expression Patterns. 2, 1-2, S. 137-143 7 S.

Multiple functions of LIM domain-binding CLIM/NLI/Ldb cofactors during zebrafish development
Becker, T., Ostendorff, H. P., Bossenz, M., Schlüter, A., Becker, C. G., Peirano, R. I. & Bach, I., Sept. 2002, in: Mechanisms of Development. 117, 1-2, S. 75-85 11 S.

Repellent guidance of regenerating optic axons by chondroitin sulfate glycosaminoglycans in zebrafish
Becker, C. G. & Becker, T., 1 Feb. 2002, in: Journal of Neuroscience. 22, 3, S. 842-853 12 S.

Peripheral patterns of terminal innervation of vestibular primary afferent neurons projecting to the vestibulocerebellum in the gerbil
Becker, T. & Becker, C. G., 23 Apr. 2001, in: Journal of Comparative Neurology. 433, 1, S. 48-61 14 S.

Antibody to the HNK-1 glycoepitope affects fasciculation and axonal pathfinding in the developing posterior lateral line nerve of embryonic zebrafish
Becker, T., Becker, C. G., Schachner, M. & Bernhardt, R. R., 2001, in: Mechanisms of Development. 109, 1, S. 37-49 13 S.

Increased NCAM-180 immunoreactivity and maintenance of L1 immunoreactivity in injured optic fibers of adult mice
Becker, C. G., Becker, T. & Meyer, R. L., 2001, in: Experimental neurology. 169, 2, S. 438-448 11 S.

Gradients of ephrin-A2 and ephrin-A5b mRNA during retinotopic regeneration of the optic projection in adult zebrafish
Becker, C. G. & Becker, T., 20 Nov. 2000, in: Journal of Comparative Neurology. 427, 3, S. 469-483 15 S.

Tenascin-R inhibits regrowth of optic fibers in vitro and persists in the optic nerve of mice after injury
Becker, T., Anliker, B., Becker, C. G., Taylor, J., Schachner, M., Meyer, R. L. & Bartsch, U., 15 Feb. 2000, in: GLIA. 29, 4, S. 330-346 17 S.

Tenascin-R inhibits the growth of optic fibers in vitro but is rapidly eliminated during nerve regeneration in the salamander Pleurodeles waltl
Becker, C. G., Becker, T., Meyer, R. L. & Schachner, M., 15 Jan. 1999, in: Journal of Neuroscience. 19, 2, S. 813-827 15 S.

Expression of polysialylated NCAM but not L1 or N-cadherin by regenerating adult mouse optic fibers in vitro
Bates, C. A., Becker, C. G., Miotke, J. A. & Meyer, R. L., Jan. 1999, in: Experimental neurology. 155, 1, S. 128-139 12 S.

Axonal regrowth after spinal cord transection in adult zebrafish
Becker, T., Wullimann, M. F., Becker, C. G., Bernhardt, R. R. & Schachner, M., 27 Jan. 1997, in: Journal of Comparative Neurology. 377, 4, S. 577-595 19 S.

The polysialic acid modification of the neural cell adhesion molecule is involved in spatial learning and hippocampal long-term potentiation
Becker, C. G., Artola, A., Gerardy-Schahn, R., Becker, T., Welzl, H. & Schachner, M., 1996, in: Journal of neuroscience research. 45, 2, S. 143-152 10 S.

Immunohistological localization of tenascin-c in the developing and regenerating retinotectal system of two amphibian species
Becker, T., Becker, C. G., Niemann, U., Naujoks-Manteuffel, C., Bartsch, U., Schachner, M. & Roth, G., 2 Okt. 1995, in: Journal of Comparative Neurology. 360, 4, S. 643-657 15 S.

Polysialic acid expression in the salamander retina is inducible by thyroxine
Becker, C. G., Becker, T., Schmidt, A. & Roth, G., 13 Mai 1994, in: Brain research. 79, 1, S. 140-146 7 S.

Amphibian-specific regulation of polysialic acid and the neural cell adhesion molecule in development and regeneration of the retinotectal system of the salamander Pleurodeles waltl
Becker, T., Becker, C. G., Niemann, U., Naujoks-Manteuffel, C., Gerardy-Schahn, R. & Roth, G., 22 Okt. 1993, in: Journal of Comparative Neurology. 336, 4, S. 532-544 13 S.

Distribution of NCAM-180 and polysialic acid in the developing tectum mesencephali of the frog Discoglossus pictus and the salamander Pleurodeles waltl
Becker, C. G., Becker, T. & Roth, G., Mai 1993, in: Cell and tissue research. 272, 2, S. 289-301 13 S.

Cell migration along glial fibers in dissociated cell culture of the frog optic tectum
Becker, T. & Becker, C. G., 12 Juli 1991, in: Brain research. 553, 2, S. 331-335 5 S.

Auszeichnungen

Alexander-von-Humboldt Professorship
Becker, C. (Empfänger:in), 1 Juli 2021