

List of Publications 1986-2021, Prof. Michael Detmar

2021

Polomska A, Gousopoulos E, Fehr D, Bachmann A, Bonmarin M, Detmar M, Lindenblatt N. (2021) Development and clinical validation of the LymphMonitor technology to quantitatively assess lymphatic function. *Diagnostics* 11(10), 1873; <https://doi.org/10.3390/diagnostics11101873> (registering DOI)

D'Addio M, Frey J, Tacconi C, Commerford CD, Halin C, Detmar M, Cummings RD, Otto VI. (2021) Sialoglycans on lymphatic endothelial cells augment interactions with Siglec-1 (CD169) of lymph node macrophages. *FASEB J.* 35(11): e22017. doi: 10.1096/fj.202100300R

Ducoli L, Agrawal S, Hon CC, Ramilowski JA, Sibler E, Tagami M, Itoh M, Kondo N, Abugessaisa I, Hasegawa A, Kasukawa T, Suzuki H, Carninci P, Shin JW, de Hoon MJL, Detmar M. (2021) The choice of negative control antisense oligonucleotides dramatically impacts downstream analysis depending on the cellular background. *BMC Genomic Data* 22:33. doi.org/10.1186/s12863-021-00992-1

Sibler E, He Y, Ducoli L, Keller N, Fujimoto N, Dieterich LC, Detmar M. (2021) Single-cell transcriptional heterogeneity of lymphatic endothelial cells in normal and inflamed murine lymph nodes. *Cells.* 10(6):1371. doi: 10.3390/cells10061371

Cousin N, Cap S, Dühr M, Tacconi C, Detmar M, Dieterich LC. (2021) Lymphatic PD-L1 expression restricts tumor-specific CD8+ T cell responses. *Cancer Res.* 81(15): 4133-4144. doi: 10.1158/0008-5472.CAN-21-0633

Arasa J, Collado-Diaz V, Kritikos I, Medina-Sanchez JD, Friess MC, Sigmund EC, Schineis P, Hunter MC, Tacconi C, Paterson N, Nagasawa T, Kiefer F, Makinen T, Detmar M, Moser M, Lämmermann T, Halin C. (2021) Upregulation of VCAM-1 in lymphatic collectors supports dendritic cell entry and rapid migration to lymph nodes in inflammation. *J Exp Med.* 218(7): e20201413. doi: 10.1084/jem.20201413

Tacconi C, Commerford CD, Dieterich LC, Schwager S, He Y, Ikenberg K, Friebel E, Becher B, Tugues S, Detmar M. (2021) CD169+ lymph node macrophages have protective functions in mouse breast cancer metastasis. *Cell Rep.* 35(2): 108993. doi: 10.1016/j.celrep.2021.108993. PMID: 33852863

Ducoli L, Detmar M. (2021) Beyond PROX1: transcriptional, epigenetic, and noncoding RNA regulation of lymphatic identity and function. *Dev Cell.* 56(4): 406-426. doi: 10.1016/j.devcel.2021.01.018

Ducoli L, Agrawal S, Sibler E, Kouno T, Tacconi C, Hon CC, Berger SD, Müllhaupt D, He Y, Kim J, D'Addio M, Dieterich LC, Carninci P, de Hoon MJL, Shin JW, Detmar M. (2021) LETR1 is a lymphatic endothelial-specific lncRNA governing cell proliferation and migration through KLF4 and SEMA3C. *Nat Commun.* 12(1): 925. doi: 10.1038/s41467-021-21217-0. PMID: 33568674

Silvestre-Roig C, Lemnitzer P, Gall J, Schwager S, Toska A, Yvan-Charvet L, Detmar M, Soehnlein O. (2021) Arterial delivery of VEGF-C stabilizes atherosclerotic lesions. *Circ Res.* 128(2): 284-286. doi: 10.1161/CIRCRESAHA.120.317186. *Epub 2020 Nov 19.*

Tacconi C, He Y, Ducoli L, Detmar M. (2021) Epigenetic regulation of the lineage specificity of primary human dermal lymphatic and blood vascular endothelial cells. *Angiogenesis.* 24(1): 67-82. doi: 10.1007/s10456-020-09743-9.

2020

Babity S, Polomska AK, Couture F, Bonmarin M, Fehr D, Detmar M, Brambilla D. (2020) Rational design of a fluorescent microneedle tattoo for minimally invasive monitoring of lymphatic function. *J Control Release.* 327: 350-359. doi: 10.1016/j.jconrel.2020.08.017

Roudnicky F, Poyet C, Buser L, Saba K, Wild P, Otto VI, Detmar M. (2020) Characterization of tumor blood vasculature expression of human Invasive bladder cancer by laser capture microdissection and transcriptional profiling. *Am J Pathol.* 190(9): 1960-1970. doi: 10.1016/j.ajpath.2020.05.020

Sesartic K, Ikenberg K, Yoon SY, Detmar M. (2020) Keratinocyte-expressed podoplanin is dispensable for multi-step skin carcinogenesis. *Cells.* 9(6): 1542. doi:10.3390/cells9061542

Dieterich LC, Tacconi C, Menzi F, Proulx ST, Kapaklikaya K, Hamada M, Takahashi S, Detmar M. (2020) Lymphatic MAFB regulates vascular patterning during developmental and pathological lymphangiogenesis. *Angiogenesis*. 23(3): 411-423. doi: 10.1007/s10456-020-09721-1

Fujimoto N, He Y, D'Addio M, Tacconi C, Detmar M, Dieterich LC. (2020) Single-cell mapping reveals new markers and functions of lymphatic endothelial cells in lymph nodes. *PLoS Biol*. 18(4): e3000704. doi: 10.1371/journal.pbio.3000704. eCollection 2020 Apr.

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Tacconi C, Schwager S, Cousin N, Bajic D, Sesartic M, Sundberg J, Neri D, Detmar M. (2019) Antibody-mediated delivery of VEGFC ameliorates experimental chronic colitis. *ACS Pharmacol Transl Sci*. 2(5): 342-352. doi: 10.1021/acspstsci.9b00037.

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Dieterich LC, Kapaklikaya K, Cetintas T, Proulx ST, Commerford CD, Ikenberg K, Bachmann SB, Scholl J, Detmar M. (2019) Transcriptional profiling of breast cancer-associated lymphatic vessels reveals VCAM-1 as regulator of lymphatic invasion and permeability. *Int J Cancer*. 145(10): 2804-2815. doi: 10.1002/ijc.32594

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Yoon SY, Dieterich LC, Karaman S, Proulx ST, Bachmann SB, Sciaroni C, Detmar M. (2019) An important role of cutaneous lymphatic vessels in coordinating and promoting anagen hair follicle growth. *PLoS One*. 14(7): e0220341. doi: 10.1371/journal.pone.0220341

Yoon SY, Dieterich LC, Tacconi C, Sesartic M, He Y, Brunner L, Kwon O, Detmar M. (2019) An important role of podoplanin in hair follicle growth. *PLoS One* 14(7): e0219938. doi: 10.1371/journal.pone.0219938

Bachmann SB, Gsponer D, Montoya-Zegarra JA, Schneider M, Scholkmann F, Tacconi C, Noerrellykke SF, Proulx ST, Detmar M. (2019) A distinct role of the autonomic nervous system in modulating the function of lymphatic vessels under physiological and tumor-draining conditions. *Cell Rep*. 27(11): 3305-3314.e13. doi: 10.1016/j.celrep.2019.05.050

Bachmann SB, Proulx ST, He Y, Ries M, Detmar M. (2019) Differential effects of anaesthesia on the contractility of lymphatic vessels in vivo. *J Physiol*. 597(11): 2841-2852. doi: 10.1113/JP277254

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Polomska AK, Proulx ST, Brambilla D, Fehr D, Bonmarin M, Brändli S, Meboldt M, Steuer C, Vasileva T, Reinke N, Leroux JC, Detmar M. (2019) Minimally-invasive method for the point-of-care quantification of lymphatic vessel function. *JCI Insight*. 4(4). pii: 126515. doi: 10.1172/jci.insight.126515

Ma Q, Ries M, Decker Y, Müller A, Riner C, Bücken A, Fassbender K, Detmar M, Proulx ST. (2019) Rapid lymphatic efflux limits cerebrospinal fluid flow to the brain. *Acta Neuropathol*. 137(1):151-165. doi: 10.1007/s00401-018-1916-x

Montoya-Zegarra JA, Russo E, Runge P, Jadhav M, Willrodt AH, Stoma S, Nørrellykke SF, Detmar M, Halin C. (2019) AutoTube: a novel software for the automated morphometric analysis of vascular networks in tissues. *Angiogenesis*. 22(2):223-236. doi: 10.1007/s10456-018-9652-3

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Schwager S, Renner S, Hemmerle T, Karaman S, Proulx ST, Fetz R, Golding-Ochsenbein AM, Probst P, Halin C, Neri D, Detmar M. (2018) Antibody-mediated delivery of VEGF-C potentially reduces chronic skin inflammation. *JCI Insight*. 3(23). pii: 124850. doi: 10.1172/jci.insight.124850

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Bachmann, SB, Detmar M, Proulx ST. (2018) Visualization and Measurement of Lymphatic Function In Vivo. *Methods Mol Biol*. 1846: 197-211. doi: 10.1007/978-1-4939-8712-2_13

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Ma Q, Dieterich LC, Ikenberg K, Bachmann SB, Mangana J, Proulx ST, Amann VC, Levesque MP, Dummer R, Baluk P, McDonald DM, Detmar M. (2018) Unexpected contribution of lymphatic vessels to promotion of distant metastatic tumor spread. *Sci Adv*. 4: 8, eaat4758. doi: 10.1126/sciadv.aat4758

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