

## **Personal Data**

**Name** Dr. med. Michael Karl Sixt  
**Work address** Institute of Science and Technology Austria  
Am Campus 1; 3400 Klosterneuburg, Austria  
<http://ist.ac.at/research/life-sciences/sixt-group/>

## **Education**

7/2002 Approbation in human medicine  
1998 - 2002 Dissertation (MD) at University of Erlangen, Germany  
1994 - 2000 Studies of Medicine at the University of Erlangen, Germany

## **Current Position**

Since 6/2014 Vice President, Institute of Science and Technology Austria  
Since 9/2013 Tenured Professor, Institute of Science and Technology Austria

## **Previous Positions**

9/2010 - 9/2013 Tenure Track Assistant Professor, Institute of Science and Technology Austria  
11/2004 - 8/2010 Group leader at Max Planck Institute of Biochemistry, Martinsried, Germany  
8/2002 - 10/2004 Postdoc at the Institute for Experimental Pathology, Lund, Sweden  
1/2001 - 7/2002 Clinical resident at the Dermatological Clinic Erlangen, Germany

## **Selected Distinctions**

2014 Elected EMBO Member  
2013 European Biophysical Societies Association Young Investigator Medal  
2013 Elected member of the Young Academy of the Austrian Academy of Sciences  
2012 Ignaz Lieben Award of the Austrian Academy of Sciences  
2011 FWF (Austrian Science Fund) START Award  
2008 Endowed Professor of Peter Hans Hofschneider Foundation  
2003 Novartis Dissertation Award

## Full list of peer reviewed publications

Renkawitz J, Reversat A, Leithner A, Merrin J, Sixt M.

Micro-engineered "pillar forests" to study cell migration in complex but controlled 3D environments.  
**Methods Cell Biol.** 2018.

Dolati S, Kage F, Mueller J, Müsken M, Kirchner M, Dittmar G, Sixt M, Rottner K, Falcke M.

On the relation between filament density, force generation, and protrusion rate in mesenchymal cell motility.  
**Mol Biol Cell.** 2018 Nov 1;29(22):2674-2686.

Moalli F, Ficht X, Germann P, Vladymyrov M, Stolp B, de Vries I, Lyck R, Balmer J, Fiocchi A, Kreutzfeldt M, Merkler D, Iannacone M, Ariga A, Stoffel MH, Sharpe J, Bähler M, Sixt M, Diz-Muñoz A, Stein JV.

The Rho regulator Myosin IXb enables nonlymphoid tissue seeding of protective CD8+ T cells.  
**J Exp Med.** 2018 Jul 2;215(7):1869-1890.

Brown M, Johnson LA, Leone DA, Majek P, Vaahtomeri K, Senfter D, Bukosza N, Schachner H, Asfour G, Langer B, Hauschild R, Parapatics K, Hong YK, Bennett KL, Kain R, Detmar M, Sixt M\*, Jackson DG, Kerjaschki D\*.

Lymphatic exosomes promote dendritic cell migration along guidance cues.  
**J Cell Biol.** 2018 Jun 4;217(6):2205-2221.

Hons M, Kopf A, Hauschild R, Leithner A, Gaertner F, Abe J, Renkawitz J, Stein JV\*, Sixt M\*.

Chemokines and integrins independently tune actin flow and substrate friction during intranodal migration of T cells.  
**Nat Immunol.** 2018 Jun;19(6):606-616.

Brown M, Assen FP, Leithner A, Abe J, Schachner H, Asfour G, Bago-Horvath Z, Stein JV, Uhrin P, Sixt M\*, Kerjaschki D\*.

Lymph node blood vessels provide exit routes for metastatic tumor cell dissemination in mice.  
**Science.** 2018 Mar 23;359(6382):1408-1411.

Leithner A, Renkawitz J, De Vries I, Hauschild R, Haecker H, Sixt M

Fast and efficient genetic engineering of hematopoietic precursor cells for the study of dendritic cell migration  
**European J Immunol,** 2018

Gaertner F, Ahmad Z, Rosenberger G, Fan S, Nicolai L, Busch B, Yavuz G, Luckner M, Ishikawa-Ankerhold H, Hennel R, Benechet A, Lorenz M, Chandraratne S, Schubert I, Helmer S, Striednig B, Janko M, Böttcher RT, Verschoor A, Leon C, Gachet C, Gudermann T, Mederos Y Schnitzler M, Pincus Z, Iannacone M, Haas R, Wanner G, Lauber K, Sixt M, Massberg S.

Migrating Platelets Are Mechano-scavengers that Collect and Bundle Bacteria.  
**Cell.** 2017 Nov 30;171(6):1368-1382.e23.

Spira F, Cuylen-Haering S, Mehta S, Samwer M, Reversat A, Verma A, Oldenbourg R, Sixt M, Gerlich DW.

Cytokinesis in vertebrate cells initiates by contraction of an equatorial actomyosin network composed of randomly oriented filaments.

**Elife.** 2017 Nov 6;6. pii: e30867. doi:

Mueller J, Szep G, Nemethova M, de Vries I, Lieber AD, Winkler C, Kruse K, Small JV, Schmeiser C, Keren K, Hauschild R, Sixt M.

Load Adaptation of Lamellipodial Actin Networks.

**Cell.** 2017 Sep 21;171(1):188-200.

Veß A, Blache U, Leitner L, Kurz ARM, Ehrenpfordt A, Sixt M, Posern G.

A dual phenotype of MDA-MB-468 cancer cells reveals mutual regulation of tensin3 and adhesion plasticity.

**J Cell Sci.** 2017 Jul 1;130(13):2172-2184.

Ebner F, Sedlyarov V, Tasciyan S, Ivin M, Kratochvill F, Gratz N, Kenner L, Villunger A, Sixt M, Kovarik P.

The RNA-binding protein tristetruprolin schedules apoptosis of pathogen-engaged neutrophils during bacterial infection.

**J Clin Invest.** 2017 Jun 1;127(6):2051-2065.

Vaahtomeri K, Brown M, Hauschild R, De Vries I, Leithner AF, Mehling M, Kaufmann WA, Sixt M.

Locally Triggered Release of the Chemokine CCL21 Promotes Dendritic Cell Transmigration across Lymphatic Endothelia.

**Cell Rep.** 2017 May 2;19(5):902-909.

Schwarz J, Bierbaum V, Vaahtomeri K, Hauschild R, Brown M, de Vries I, Leithner A, Reversat A, Merrin J, Tarrant T, Bollenbach T, Sixt M.

Dendritic Cells Interpret Haptotactic Chemokine Gradients in a Manner Governed by Signal-to-Noise Ratio and Dependent on GRK6.

**Curr Biol.** 2017 May 8;27(9):1314-1325.

Kage F, Winterhoff M, Dimchev V, Mueller J, Thalheim T, Freise A, Brühmann S, Kollasser J, Block J, Dimchev G, Geyer M, Schnittler HJ, Brakebusch C, Stradal TE, Carlier MF, Sixt M, Käs J, Faix J, Rottner K.

FMNL formins boost lamellipodial force generation.

**Nat Commun.** 2017 Mar 22;8:14832.

Horsthemke M, Bachg AC, Groll K, Moyzio S, Mütter B, Hemkemeyer SA, Wedlich-Söldner R, Sixt M, Tacke S, Bähler M, Hanley PJ.

Multiple roles of filopodial dynamics in particle capture and phagocytosis and phenotypes of Cdc42 and Myo10 deletion.

**J Biol Chem.** 2017 Apr 28;292(17):7258-7273.

Schwarz J, Bierbaum V, Merrin J, Frank T, Hauschild R, Bollenbach T, Tay S, Sixt M\*, Mehling M\*.  
A microfluidic device for measuring cell migration towards substrate-bound and soluble chemokine gradients.  
**Sci Rep.** 2016 Nov 7;6:36440.

Martins R, Maier J, Gorki AD, Huber KV, Sharif O, Starkl P, Saluzzo S, Quattrone F, Gawish R, Lakovits K, Aichinger MC, Radic-Sarikas B, Lardeau CH, Hladik A, Korosec A, Brown M, Vaahtomeri K, Duggan M, Kerjaschki D, Esterbauer H, Colinge J, Eisenbarth SC, Decker T, Bennett KL, Kubicek S, Sixt M, Superti-Furga G, Knapp S.  
Heme drives hemolysis-induced susceptibility to infection via disruption of phagocyte functions.  
**Nat Immunol.** 2016 Dec;17(12):1361-1372.

Salzer E, Cagdas D, Hons M, Mace EM, Garncarz W, Petronczki ÖY, Platzer R, Pfajfer L, Bilic I, Ban SA, Willmann KL, Mukherjee M, Supper V, Hsu HT, Banerjee PP, Sinha P, McClanahan F, Zlabinger GJ, Pickl WF, Gribben JG, Stockinger H, Bennett KL, Huppa JB, Dupré L, Sanal Ö, Jäger U, Sixt M, Tezcan I, Orange JS, Boztug K.  
RASGRP1 deficiency causes immunodeficiency with impaired cytoskeletal dynamics.  
**Nat Immunol.** 2016 Dec;17(12):1352-1360

Leithner A, Eichner A, Müller J, Reversat A, Brown M, Schwarz J, Merrin J, de Gorter DJ, Schur F, Bayerl J, de Vries I, Wieser S, Hauschild R, Lai FP, Moser M, Kerjaschki D, Rottner K, Small JV, Stradal TE, Sixt M.  
Diversified actin protrusions promote environmental exploration but are dispensable for locomotion of leukocytes.  
**Nat Cell Biol.** 2016 Nov;18(11):1253-1259.

Schwarz J, Sixt M.  
Quantitative Analysis of Dendritic Cell Haptotaxis.  
**Methods Enzymol.** 2016;570:567-81.

Paluch EK, Aspalter IM, Sixt M.  
Review: Focal Adhesion-Independent Cell Migration.  
**Annu Rev Cell Dev Biol.** 2016 Oct 6;32:469-490.

Russo E, Teijreira A, Vaahtomeri K, Willrodt AH, Bloch JS, Nitschké M, Santambrogio L, Kerjaschki D, Sixt M, Halin C.  
Intralymphatic CCL21 Promotes Tissue Egress of Dendritic Cells through Afferent Lymphatic Vessels.  
**Cell Rep.** 2016 Feb 23;14(7):1723-1734.

Kiermaier E, Moussion C, Veldkamp CT, Gerardy-Schahn R, de Vries I, Williams LG, Chaffee GR, Phillips AJ, Freiberger F, Imre R, Taleski D, Payne RJ, Braun A, Förster R, Mechtler K, Mühlhoff M, Volkman BF, Sixt M.  
Polysialylation controls dendritic cell trafficking by regulating chemokine recognition.  
**Science.** 2016 Jan 8;351(6269):186-90

Veldkamp CT, Kiermaier E, Gabel-Eissens SJ, Gillitzer ML, Lippner DR, DiSilvio FA, Mueller CJ, Wantuch PL, Chaffee GR, Famiglietti MW, Zgoba DM, Bailey AA, Bah Y, Engebretson SJ, Graupner DR, Lackner ER, LaRosa VD, Medeiros T, Olson ML, Phillips AJ, Pyles H, Richard AM, Schoeller SJ, Touzeau B, Williams LG, Sixt M, Peterson FC.  
Solution Structure of CCL19 and Identification of Overlapping CCR7 and PSGL-1 Binding Sites.  
**Biochemistry.** 2015 Jul 14;54(27):4163-6

Sarris M, Sixt M.  
Review: Navigating in tissue mazes: chemoattractant interpretation in complex environments.  
**Curr Opin Cell Biol.** 2015 Oct;36:93-102

Chabaud M, Heuzé ML, Bretou M, Vargas P, Maiuri P, Solanes P, Maurin M, Terriac E, Le Berre M, Lankar D, Piolt T, Adelstein RS, Zhang Y, Sixt M, Jacobelli J, Bénichou O, Voituriez R, Piel M, Lennon-Duménil AM.  
Cell migration and antigen capture are antagonistic processes coupled by myosin II in dendritic cells.  
**Nat Commun.** 2015 Jun 25;6:7526

Holst K, Guseva D, Schindler S, Sixt M, Braun A, Chopra H, Pabst O, Ponimaskin E.  
The serotonin receptor 5-HT7R regulates the morphology and migratory properties of dendritic cells.  
**J Cell Sci.** 2015 Aug 1;128(15):2866-80

Maiuri P, Rupprecht JF, Wieser S, Ruprecht V, Bénichou O, Carpi N, Coppey M, De Beco S, Gov N, Heisenberg CP, Lage Crespo C, Lautenschlaeger F, Le Berre M, Lennon-Duménil AM, Raab M, Thiam HR, Piel M\*, Sixt M\*, Voituriez R\*.  
Actin flows mediate a universal coupling between cell speed and cell persistence.  
**Cell.** 2015 Apr 9;161(2):374-86; \* corresponding authors

Heger K, Kober M, Rieß D, Drees C, de Vries I, Bertossi A, Roers A, Sixt M, Schmidt-Supprian M.  
A novel Cre recombinase reporter mouse strain facilitates selective and efficient infection of primary immune cells with adenoviral vectors.  
**Eur J Immunol.** 2015 Jun;45(6):1614-20

Ruprecht V, Wieser S, Callan-Jones A, Smutny M, Morita H, Sako K, Barone V, Ritsch-Marte M, Sixt M, Voituriez R, Heisenberg CP.  
Cortical contractility triggers a stochastic switch to fast amoeboid cell motility.  
**Cell.** 2015 Feb 12;160(4):673-85.

Stoler-Barak L, Moussion C, Shezen E, Hatzav M, Sixt M, Alon R.  
Blood vessels pattern heparan sulfate gradients between their apical and basolateral aspects.

**PLoS One.** 2014 Jan 22;9(1)

Majumdar R, Sixt M, Parent CA.

Review: New paradigms in the establishment and maintenance of gradients during directed cell migration.

**Curr Opin Cell Biol.** 2014 Oct;30:33-40

Dueck A, Eichner A, Sixt M, Meister G.

A miR-155-dependent microRNA hierarchy in dendritic cell maturation and macrophage activation.

**FEBS Lett.** 2014 Feb 14;588(4):632-40

Konradi S, Yasmin N, Haslwanter D, Weber M, Gesslbauer B, Sixt M, Strobl H.

Langerhans cell maturation is accompanied by induction of N-cadherin and the transcriptional regulators of epithelial-mesenchymal transition ZEB1/2.

**Eur J Immunol.** 2014 Feb;44(2):553-60

Fuertbauer E, Zaujec J, Uhrin P, Raab I, Weber M, Schachner H, Bauer M, Schütz GJ, Binder BR, Sixt M, Kerjaschki D, Stockinger H.

Thymic medullar conduits-associated podoplanin promotes natural regulatory T cells.

**Immunol Lett.** 2013 Jul-Aug;154(1-2):31-41.

Weber M, Sixt M

Live cell imaging of chemotactic dendritic cell migration in explanted mouse ear preparations

**Methods Mol Biol.** 2013;1013:215-26

Weber M, Hauschild R, Schwarz J, Moussion C, de Vries I, Legler DF, Luther SA, Bollenbach T, Sixt M

Interstitial dendritic cell guidance by haptotactic chemokine gradients

**Science.** 2013 Jan 18;339(6117):328-32

Zhang L, Orban M, Lorenz M, Barocke V, Braun D, Urtz N, Schulz C, von Brühl ML, Tirniceriu A, Gaertner F, Proia RL, Graf T, Bolz SS, Montanez E, Prinz M, Müller A, von Baumgarten L, Billich A, Sixt M, Fässler R, von Andrian UH, Junt T, Massberg S.

A novel role of sphingosine 1-phosphate receptor S1pr1 in mouse thrombopoiesis.

**J Exp Med.** 2012 Nov 12.

Schachtner H, Li A, Stevenson D, Calaminus SD, Thomas SG, Watson SP, Sixt M, Wedlich-Soldner R, Strathdee D, Machesky LM.

Tissue inducible Lifeact expression allows visualization of actin dynamics in vivo and ex vivo.

**Eur J Cell Biol.** 2012 Nov;91(11-12):923-9.

Sixt M.

Comment: Cell migration: fibroblasts find a new way to get ahead.

**J Cell Biol.** 2012 Apr 30;197(3):347-9.

Hepper I, Schymeinsky J, Weckbach LT, Jakob S, Frommhold D, Sixt M, Laschinger M, Sperandio M, Walzog B.

The mammalian actin-binding protein 1 is critical for spreading and intraluminal crawling of neutrophils under flow conditions.

**J Immunol.** 2012 May 1;188(9):4590-601.

Wendland M, Willenzon S, Kocks J, Davalos-Misslitz AC, Hammerschmidt SI, Schumann K, Kremmer E, Sixt M, Hoffmeyer A, Pabst O, Förster R

Lymph node T cell homeostasis relies on steady state homing of dendritic cells.

**Immunity.** 2011 Dec 23;35(6):945-57

Eichner A, Sixt M

Comment: Setting the clock for recirculating lymphocytes.

**Sci Signal.** 2011 Nov 8;4(198):pe43

Schraivogel D, Weinmann L, Beier D, Tabatabai G, Eichner A, Zhu JY, Anton M, Sixt M, Weller M, Beier CP, Meister G

CAMTA1 is a novel tumour suppressor regulated by miR-9/9\* in glioblastoma stem cells.

**EMBO J.** 2011 Aug 19;30(20):4309-22

Soriano SF, Hons M, Schumann K, Kumar V, Dennier TJ, Lyck R, Sixt M, Stein JV

In vivo analysis of uropod function during physiological T cell trafficking.

**J Immunol.** 2011 Sep 1;187(5):2356-64.

Sixt M, Lämmermann T

In vitro analysis of chemotactic leukocyte migration in 3D environments.

**Methods Mol Biol.** 2011;769:149-65.

Link A, Hardie DL, Favre S, Britschgi MR, Adams DH, Sixt M, Cyster JG, Buckley CD, Luther SA

Association of T-zone reticular networks and conduits with ectopic lymphoid tissues in mice and humans.

**Am J Pathol.** 2011 Apr;178(4):1662-75

Sixt M, Parent CA

Comment: Cells on the move in Philadelphia.

**Mol Biol Cell.** 2011 Mar 15;22(6):724

Sixt M

Review: Interstitial locomotion of leukocytes.  
**Immunol Lett.** 2011 Jul;138(1):32-4

Renkawitz J, Sixt M  
Review: Mechanisms of force generation and force transduction during interstitial leukocyte migration  
**EMBO Rep.** 2010 Oct;11(10):744-50

Weber M, Sixt M  
Comment: MEK signaling tunes actin treadmilling for interstitial lymphocyte migration  
**EMBO Journal.** 2010 Sep 1;29(17):2861-3

Schumann K, Lämmermann T, Bruckner M, Legler DF, Polleux J, Spatz JP, Schuler G, Förster R, Lutz MB, Sorokin L, Sixt M  
Immobilized chemokine fields and soluble chemokine gradients shape migration patterns of dendritic cells  
**Immunity.** 2010 May 28;32(5):703-13

Mohan H, Krumbholz M, Sharma R, Eisele S, Junker A, Sixt M, Newcombe J, Wekerle H, Hohlfeld R, Lassmann H, Meinl E  
Extracellular matrix in multiple sclerosis lesions: Fibrillar collagens, biglycan and decorin are upregulated and associated with infiltrating immune cells.  
**Brain Pathol.** 2010 Sep;20(5):966-75

Nourshargh S, Hordjik P, Sixt M  
Review: Regulation of leukocyte motility: through venular walls and beyond  
**Nat Rev Mol Cell Biol.** 2010 May;11(5):366-78

Riedl J, Flynn KC, Raducanu A, Gärtner F, Beck G, Bösl M, Bradke F, Massberg S, Aszodi A, Sixt M\*, Wedlich-Söldner R\*  
Lifeact mice for studying F-actin dynamics  
**Nat Methods.** 2010 Mar;7(3):168-9

Pflicke H, Sixt M  
Preformed portals facilitate dendritic cell entry into afferent lymphatic vessels  
**J Exp Med.** 2009 Dec 21;206(13):2925-35

Renkawitz J, Schumann K, Weber M, Lämmermann T, Pflicke H, Polleux J, Spatz JP, Sixt M  
Adaptive force transmission in amoeboid cell migration  
**Nat Cell Biol.** 2009 Dec;11(12):1438-43

Schymeinsky J, Gerstl R, Mannigel I, Niedung K, Frommhold D, Panthel K, Heesemann J, Sixt M, Quast T, Kolanus W, Mocsai A, Wienands J, Sperandio M, Walzog B  
A fundamental role of mAbp1 in neutrophils: impact on  $\beta 2$  integrin-mediated phagocytosis and adhesion in vivo  
**Blood.** 2009 Nov 5;114(19):4209-20

Lämmermann T, Sixt M  
Review: Mechanical modes of amoeboid cell migration  
**Curr Opin Cell Biol.** 2009 Oct;21(5):636-44

Wolf AM, Hochegger K, Zeiser R, Duerr C, Gerlach UV, Sixt M, Markut L, Baier G, Rosenkranz AR, Wolf D  
FTY720 abrogates the therapeutic potential of adoptively transferred Treg via inhibition of IL-2 induced in vivo expansion  
**J Immunol.** 2009 Sep 15;183(6):3751-60

Lämmermann T, Renkawitz J, Wu X, Brakebusch C, Sixt M  
Plenary paper: Cdc42-dependent leading edge coordination is essential for interstitial dendritic cell migration.  
**Blood.** 2009 Jun 4;113(23):5703-10

Quast T, Tappertzhofen B, Schild C, Grell J, Czeloth N, Forster R, Alon R, Fraemohs L, Dreck K, Weber C, Lämmermann T, Sixt M, Kolanus W  
Cytohesin-1 controls the activation of RhoA and modulates integrin-dependent adhesion and migration of dendritic cells.  
**Blood.** 2009 Jun 4;113(23):5801-10

Moser M, Bauer M, Schmid S, Ruppert R, Schmidt S., Sixt M, Wang HV, Sperandio M, Fässler R  
Kindlin-3 is required for  $\beta 2$  integrin-mediated leukocyte adhesion to endothelial cells.  
**Nat Med.** 2009 Mar;15(3):300-5

Bauer M, Brakebusch C, Coisne C, Sixt M, Wekerle H, Engelhardt B, Fässler R  
Beta 1 Integrins differentially control extravasation of inflammatory subsets into the CNS during autoimmunity.  
**PNAS.** 2009 Feb 10;106(6):1920-5

Cremer S, Sixt M  
Review: Analogies in the evolution of individual and social immunity.  
**Philos Trans R Soc Lond B Biol Sci.** 2009 Jan 12;364(1513):129-42

Lämmermann T, Bader BL, Monkley SJ, Worbs T, Wedlich-Söldner R, Hirsch K, Keller M, Förster R, Critchley DR, Fässler R, Sixt M  
Rapid leukocyte migration by integrin-independent flowing and squeezing.  
**Nature.** 2008 May 1;453(7191):51-5

Riedl J, Crevenna A, Kessenbrock K, Yu J, Neukirchen D, Bista M, Bradke F, Jenne D, Holak T, Werb Z, Sixt M\*, Wedlich-Soldner R\*

Lifeact: a versatile marker to visualize F-actin.

**Nat Methods**, 2008 Jul;5(7):605-7

Lämmermann T, Sixt M

Review: The microanatomy of T-cell responses.

**Immunol Rev**, 2008 Feb;221:26-43

Lokmic Z, Lämmermann T, Sixt M, Cardell S, Hallmann R, Sorokin L

Review: The extracellular matrix of the spleen as a potential organizer of immune cell compartments.

**Semin Immunol**, 2008 Feb;20(1):4-13

Kessenbrock K, Fröhlich L, Sixt M, Lämmermann T, Pfister H, Bateman A, Belaouaj A, Ring J, Ollert M, Fässler R, Jenne DE.

Proteinase 3 and neutrophil elastase enhance inflammation in mice by inactivating antiinflammatory progranulin.

**J Clin Invest**, 2008 Jul;118(7):2438-47

Frommhold D, Ludwig A, Bixel MG, Zarbock A, Babushkina I, Weissinger M, Cauwenberghs S, Ellies LG, Marth JD, Beck-Sickingher AG, Sixt M, Lange-Sperandio B, Zernecke A, Brandt E, Weber C, Vestweber D, Ley K, Sperandio M

Sialyltransferase ST3Gal-IV controls CXCR2-mediated firm leukocyte arrest during inflammation.

**J Exp Med**, 2008 Jun 9;205(6):1435-46

Tripp C, Haid B, Flacher V, Sixt M, Peter H, Farkas J, Gschwentner R, Sorokin L, Romani N, Stoitznier P

The lymph vessel network in mouse skin visualized with antibodies against the hyaluronan receptor LYVE

**Immunobiology**, 2008 213(9-10):715-28

Woolf E, Grigoroava I, Sagiv A, Grabovsky V, Feigelson S, Shulman Z, Hartmann T, Sixt M, Cyster JG, Alon R

Lymph node chemokines promote sustained T lymphocyte motility without triggering stable integrin adhesiveness in the absence of shear forces.

**Nat Immunol**, 2007 Oct;8(10):1076-85

Dorn T, Kuhn U, Bungartz G, Stiller S, Bauer M, Ellwart J, Peters T, Scharffetter-Kochanek K, Semmrich M, Laschinger M, Holzmann B, Klinkert WE, Straten PT, Køllgaard T, Sixt M, Brakebusch C

RhoH is important for positive thymocyte selection and T-cell receptor signaling.

**Blood**, 2007 Mar 15;109(6):2346-55

Sixt M, Bauer M, Lämmermann T, Fässler R

Review: Beta1 integrins: zip codes and signaling relay for blood cells.

**Curr Opin Cell Biol**, 2006 Oct;18(5):482-90

Drumea-Mirancea M, Wessels JT, Müller CA, Essl M, Eble JA, Tolosa E, Koch M, Reinhardt DP, Sixt M, Sorokin L, Stierhof YD, Schwarz H, Klein G

Characterization of a conduit system containing laminin-5 in the human thymus: a potential transport system for small molecules.

**J Cell Sci**, 2006 Apr 1;119(Pt 7):1396-405

Chu H, Thievessen I, Sixt M, Lämmermann T, Waisman A, Braun A, Noegel AA, Fässler R

gamma-Parvin is dispensable for hematopoiesis, leukocyte trafficking, and T-cell-dependent antibody response.

**Mol Cell Biol**, 2006 Mar;26(5):1817-25

Sixt M, Kanazawa N, Selg M, Samson T, Roos G, Reinhardt DP, Pabst R, Lutz MB, Sorokin L

The conduit system transports soluble antigens from the afferent lymph to resident dendritic cells in the T cell area of the lymph node.

**Immunity**, 2005 Jan;22(1):19-29

Zhang H, Baader S, Sixt M, Kappler J, Rauch U

Neurocan-GFP fusion protein: a new approach to detect hyaluronan on tissue sections and living cells.

**J Histochem Cytochem**, 2004 Jul;52(7):915-22

Witte V, Laffert B, Rosorius O, Lischka P, Blume K, Galler G, Stilper A, Willbold D, D'Aloja P, Sixt M, Kolanus J, Ott M, Kolanus W, Schuler G, Baur AS

HIV-1 Nef mimics an integrin receptor signal that recruits the polycomb group protein Eed to the plasma membrane.

**Mol Cell**, 2004 May 28;15(5):933-46

Sixt M, Engelhardt B, Pausch F, Hallmann R, Wendler O, Sorokin LM

Endothelial cell laminin isoforms, laminins 8 and 10, play decisive roles in T cell recruitment across the blood-brain barrier in experimental autoimmune encephalomyelitis.

**J Cell Biol**, 2001 May 28;153(5):933-46

Sixt M, Hallmann R, Wendler O, Scharffetter-Kochanek K, Sorokin LM

Cell adhesion and migration properties of beta 2-integrin negative polymorphonuclear granulocytes on defined extracellular matrix molecules. Relevance for leukocyte extravasation.

**J Biol Chem**, 2001 Jun 1;276(22):18878-87

Wolf D, Hallmann R, Sass G, Sixt M, Küsters S, Fregien B, Trautwein C, Tiegs G

TNF-alpha-induced expression of adhesion molecules in the liver is under the control of TNFR1--relevance for concanavalin A-induced hepatitis.  
***J Immunol***, 2001 Jan 15;166(2):1300-7