

Lebenslauf

Name:	PD Dr. med. Oliver Michael Steinmetz	
Anschrift:	Budapester Str. 40 20359 Hamburg	
Geboren:	05.05.73 in Bad Oeynhausen	
Nationalität:	deutsch	
Familienstand:	ledig	
Schulbildung:	1979 - 1983 Grundschule Hohenstaufenschule, Minden 1983 - 1992 Herdergymnasium Minden	
Zivildienst:	1992 - 1993 Klinikum Minden, Krankenpflege	
Studium:	1993 - 1995 Student der Medizin an der Universität zu Köln 1995 - 2001 Student der Medizin an der Universität Hamburg	
Dissertation:	1998 - 2001 'Differentielle Expression von Spleißvarianten und potentieller neuer Interaktionspartner zur Heteromultimerbildung von BK alpha im ZNS der Maus', Zentrum für Molekulare Neurobiologie Hamburg (ZMNH) (Arbeitsgruppe: Prof. Dr. Olaf Pongs)	
Beruflicher Werdegang:	seit 15.10.01 Wissenschaftlicher Mitarbeiter, Zentrum für Innere Medizin, III. Medizinische Klinik, Universitätsklinikum Hamburg Eppendorf (Direktor: Prof. Dr. Rolf A.K. Stahl) 2008 - 2010 DFG Forschungsstipendium, Centre for Inflammatory Diseases, Monash University, Clayton, Australia (Direktor: Prof. Dr. Stephen R. Holdsworth) seit 2010 Arbeitsgruppenleiter nephrologisches Labor III. Med Klinik, Universitätsklinikum Hamburg Eppendorf 2011 Facharzt für Innere Medizin und Nephrologie 2012 Habilitation im Fach Innere Medizin, Universität Hamburg 2012 Oberarzt III. Med. Klinik/Nephrologie, Universitätsklinikum Hamburg Eppendorf	

Publikationsverzeichnis

1) Originalarbeiten (Erstautor oder gleichberechtigte Erstautorenschaft)

Luig M, Kluger MA, Goerke B, Meyer M, Nosko A, Yan I, Scheller J, Mittrücker HW, Rose-John S, Stahl RAK, Panzer U, Steinmetz OM: Inflammation-Induced IL-6 Functions as a Natural Brake on Macrophages and Limits GN. *J Am Soc Nephrol*, 2015 epub ahead of print

Kluger MA, Luig M, Wegscheid C, Goerke B, Paust HJ, Brix S, Yan I, Mittrücker HW, Hagl B, Renner ED, Tiegs G, Wiech T, Stahl RAK, Panzer U, Steinmetz OM: Stat3 Programs Th17-Specific Regulatory T Cells to Control GN. *J Am Soc Nephrol*, 25: 1291-1302, 2014.

Kluger MA, Ostmann A, Luig M, Meyer MC, Goerke B, Paust HJ, Meyer-Schwesinger C, Stahl RA, Panzer U, Tiegs G, Steinmetz OM: B-cell-derived IL-10 does not vitally contribute to the clinical course of glomerulonephritis. *Eur J Immunol*, 44: 683-693, 2014.

Steinmetz OM, Summers SA, Gan PY, Semple T, Holdsworth SR, Kitching AR: The Th17-defining transcription factor ROR γ t promotes glomerulonephritis. *J Am Soc Nephrol* 22: 472-483, 2011.

Steinmetz OM, Turner JE, Paust HJ, Lindner M, Peters A, Heiss K, Velden J, Hopfer H, Fehr S, Krieger T, Meyer-Schwesinger C, Meyer TN, Helmchen U, Mittrücker HW, Stahl RA, Panzer U: CXCR3 mediates renal Th1 and Th17 immune response in murine lupus nephritis. *J Immunol* 183:4693-4704, 2009.

Steinmetz OM, Panzer U, Turner JE, Meyer-Schwesinger C, von Ruffer C, Meyer TN, Zahner G, Gómez-Guerrero C, Schmid RM, Helmchen U, Moeckel GW, Wolf G, Stahl RA, Thaiss F: Resolution of renal inflammation: a new role for NF-kappaB1 (p50) in inflammatory kidney diseases. *Am J Physiol Renal Physiol* 297:F429-439, 2009.

Steinmetz OM, Velden J, Kneissler U, Marx M, Klein A, Helmchen U, Stahl RA, Panzer U: Analysis and classification of B-cell infiltrates in lupus and ANCA-associated nephritis. *Kidney Int* 74:448-457, 2008.

Steinmetz OM, Lange-Hüsken F, Turner JE, Vernauer A, Helmchen U, Stahl RA, Thaiss F, Panzer U: Rituximab removes intrarenal B cell clusters in patients with renal vascular allograft rejection. *Transplantation* 84:842-850, 2007.

Steinmetz OM, Fischereder M, Weiss M, Helmchen U, Stahl RA, Panzer U: Acute cellular allograft rejection in homozygous CCR5 Delta32 patients after renal transplantation. *Transplantation* 84:559-561, 2007.

Steinmetz OM, Panzer U, Fehr S, Meyer-Schwesinger C, Stahl RA, Wenzel UO: A pitfall of glomerular sieving: profibrotic and matrix proteins derive from the Bowman's capsule and not the glomerular tuft in rats with renovascular hypertension. *Nephrol Dial Transplant* 22:3055-3060, 2007.

Steinmetz OM, Sadaghiani S, Panzer U, Krebs C, Meyer-Schwesinger C, Streichert T, Fehr S, Hamming I, van Goor H, Stahl RA, Wenzel U: Antihypertensive therapy induces compartment-specific chemokine expression and a Th1 immune response in the clipped kidney of Goldblatt hypertensive rats. *Am J Physiol Renal Physiol* 292:F876-887, 2007.

Steinmetz OM, Panzer U, Reinking RR, Meyer TN, Fehr S, Schneider A, Zahner G, Wolf G, Helmchen U, Schaerli P, Stahl RA, Thaiss F: Compartment-specific expression and function of the chemokine IP-10/CXCL10 in a model of renal endothelial microvascular injury. *J Am Soc Nephrol* 17:454-464, 2006.

Steinmetz OM, Panzer U, Kneissler U, Harendza S, Lipp M, Helmchen U, Stahl RA: BCA-1/CXCL13 expression is associated with CXCR5-positive B-cell cluster formation in acute renal transplant rejection. *Kidney Int* 67:1616-1621, 2005.

Steinmetz OM, Panzer U, Reinking RR, Zahner G, Sudbeck U, Fehr S, Pfalzer B, Schneider A, Thaiss F, Mack M, Conrad S, Huland H, Helmchen U, Stahl RA: CXCR3 and CCR5 positive T-cell recruitment in acute human renal allograft rejection. *Transplantation* 78: 1341-50, 2004.

Steinmetz OM, Panzer U, Harendza S, Mertens PR, Ostendorf T, Floege J, Helmchen U, Stahl RA: No association of the -2518 MCP-1 A/G promoter polymorphism with incidence and clinical course of IgA nephropathy. *Nephrol Dial Transplant*. 19: 596-601, 2004.

2) Originalarbeiten (Ko-Autorenschaft)

Schmidt T, Paust HJ, Krebs CF, Turner JE, Kaffke A, Bennstein SB, Koyro T, Peters A, Velden J, Hünemörder S, Haag F, Steinmetz OM, Mittrücker HW, Stahl RA, Panzer U: *Arthritis Rheumatol*. 67: 475-487, 2015.

Disteldorf EM, Krebs CF, Paust HJ, Turner JE, Nouailles G, Tittel A, Meyer-Schwesinger C, Stege G, Brix S, Velden J, Wiech T, Helmchen U, Steinmetz OM, Peters A, Bennstein SB, Kaffke A, Llanto C, Lira SA, Mittrücker HW, Stahl RA, Kurts C, Kaufmann SH, Panzer U: CXCL5 Drives Neutrophil Recruitment in TH17-Mediated GN. *J Am Soc Nephrol* 26: 55-66, 2015.

Chan AJ, Alikhan MA, Odobasic D, Gan PY, Khouri MB, Steinmetz OM, Mansell AS, Kitching AR, Holdsworth SR, Summers SA: Innate IL-17A-Producing Leukocytes Promote Acute Kidney Injury via Inflammasome and Toll-Like Receptor Activation. *Am J Pathol* 184: 1411-1418, 2014.

Summers SA, Odobasic D, Khouri MB, Steinmetz OM, Yang Y, Holdsworth SR, Kitching AR: Endogenous interleukin (IL)-17A promotes pristane-induced systemic autoimmunity and lupus nephritis induced by pristane. *Clin Exp Immunol* 176: 341-350, 2014.

Krebs CF, Kapffer S, Paust HJ, Schmidt T, Bennstein SB, Peters A, Stege G, Brix SR, Meyer-Schwesinger C, Müller RU, Turner JE, Steinmetz OM, Wolf G, Stahl RA, Panzer U: MicroRNA-155 drives TH17 immune response and tissue injury in experimental crescentic GN. *J Am Soc Nephrol* 24: 1955-1965, 2013.

Hirota K, Turner JE, Villa M, Duarte JH, Demengeot J, Steinmetz OM, Stockinger B: Plasticity of Th17 cells in Peyer's patches is responsible for the induction of T cell-dependent IgA responses. *Nat Immunol*, 14:372-379, 2013.

Hoge J, Yan I, Jänner N, Schumacher V, Chalaris A, Steinmetz OM, Engel DR, Scheller J, Rose-John S, Mittrücker HW: IL-6 controls the innate immune response against *Listeria monocytogenes* via classical IL-6 signaling. *J Immunol* 190: 703-711, 2013.

Riedel JH, Paust HJ, Turner JE, Tittel AP, Krebs C, Disteldorf E, Wegscheid C, Tiegs G, Velden J, Mittrücker HW, Garbi N, Stahl RA, Steinmetz OM, Kurts C, Panzer U: Immature renal dendritic cells recruit regulatory CXCR6(+) invariant natural killer T cells to attenuate crescentic GN. *J Am Soc Nephrol* 23: 1987-2000, 2012.

Turner JE, Krebs C, Tittel AP, Paust HJ, Meyer-Schwesinger C, Bennstein SB, Steinmetz OM, Prinz I, Magnus T, Korn T, Stahl RA, Kurts C, Panzer U: IL-17A production by renal $\gamma\delta$ T cells promotes kidney injury in crescentic GN. *J Am Soc Nephrol* 23: 1486-1495, 2012.

Paust HJ, Turner JE, Riedel JH, Disteldorf E, Peters A, Schmidt T, Krebs C, Velden J, Mittrücker HW, Steinmetz OM, Stahl RA, Panzer U: Chemokines play a critical role in the cross-regulation of Th1 and Th17 immune responses in murine crescentic glomerulonephritis. *Kidney Int* 82: 72-83, 2012.

Turner JE, Paust HJ, Bennstein SB, Bramke P, Krebs C, Steinmetz OM, Velden J, Haag F, Stahl RA, Panzer U: Protective role for CCR5 in murine lupus nephritis. *Am J Physiol Renal Physiol* 302: F1503-1515, 2012.

Velden J, Paust HJ, Hoxha E, Turner JE, Steinmetz OM, Wolf G, Jabs WJ, Özcan F, Beige J, Heering PJ, Schröder S, Kneißler U, Disteldorf E, Mittrücker HW, Stahl RA, Helmchen U, Panzer U: Renal IL-17 expression in human ANCA-associated glomerulonephritis. *Am J Physiol Renal Physiol* 302: F1663-1673, 2012.

Summers SA, Chan J, Gan PY, Dewage L, Nozaki Y, Steinmetz OM, Nikolic-Paterson DJ, Kitching AR, Holdsworth SR: Mast cells mediate acute kidney injury through the production of TNF. *J Am Soc Nephrol* 22: 2226-2236, 2011.

Summers SA, Steinmetz OM, Gan PY, Ooi JD, Odobasic D, Kitching AR, Holdsworth SR: Toll-like receptor 2 induces Th17 myeloperoxidase autoimmunity while Toll-like receptor 9 drives Th1 autoimmunity in murine vasculitis. *Arthritis Rheum* 63:1124-1135, 2011

Summers SA, Steinmetz OM, Ooi JD, Gan PY, O'Sullivan KM, Visvanathan K, Akira S, Kitching AR, Holdsworth SR: Toll-Like Receptor 9 Enhances Nephritogenic Immunity and Glomerular Leukocyte Recruitment, Exacerbating Experimental Crescentic Glomerulonephritis. *Am J Pathol* 177: 2234-2244, 2010

Summers SA, Hoi A, Steinmetz OM, O'Sullivan KM, Ooi JD, Odobasic D, Akira S, Kitching AR, Holdsworth SR: TLR9 and TLR4 are required for the development of autoimmunity and lupus nephritis in pristane nephropathy. *J Autoimmun* 35: 291-298, 2010

Gan PY, Steinmetz OM, Tan DY, O'Sullivan KM, Ooi JD, Iwakura Y, Kitching AR, Holdsworth SR: Th17 Nephritogenic Immunity Induces Autoimmune anti-MPO Glomerulonephritis. *J Am Soc Nephrol* 21:925-931, 2010.

Turner JE, Paust HJ, Steinmetz OM, Peters A, Riedel JH, Erhardt A, Wegscheid C, Velden J, Fehr S, Mittrücker HW, Tiegs G, Stahl RA, Panzer U: CCR6 Recruits Regulatory T Cells and Th17 Cells to the Kidney in Glomerulonephritis. *J Am Soc Nephrol* 21:974-985, 2010.

Summers SA, Steinmetz OM, Li M, Kausman JY, Semple T, Edgton KL, Borza DB, Braley H, Holdsworth SR, Kitching AR: Th1 and Th17 cells induce proliferative glomerulonephritis. *J Am Soc Nephrol* 20:2518-2524, 2009.

Benndorf RA, Krebs C, Hirsch-Hoffmann B, Schwedhelm E, Cieslar G, Schmidt-Haupt R, Steinmetz OM, Meyer-Schwesinger C, Thaiss F, Haddad M, Fehr S, Heilmann A, Helmchen U, Hein L, Ehmke H, Stahl RA, Böger RH, Wenzel UO: Angiotensin II type 2 receptor deficiency aggravates renal injury and reduces survival in chronic kidney disease in mice. *Kidney Int* 75:1039-1049, 2009.

Turner JE, Paust HJ, Steinmetz OM, Peters A, Meyer-Schwesinger C, Heymann F, Helmchen U, Fehr S, Horuk R, Wenzel U, Kurts C, Mittrücker HW, Stahl RA, Panzer U: CCR5 deficiency aggravates crescentic glomerulonephritis in mice. *J Immunol* 181:6546-6556, 2008.

Panzer U, Zahner G, Wienberg U, Steinmetz OM, Peters A, Turner JE, Paust HJ, Wolf G, Stahl RA, Schneider A: 15-deoxy-Delta^{12,14}-prostaglandin J₂ inhibits INF-gamma-induced JAK/STAT1 signalling pathway activation and IP-10/CXCL10 expression in mesangial cells. *Nephrol Dial Transplant* 23:3776-3785, 2008.

Paust HJ, Turner JE, Steinmetz OM, Peters A, Heymann F, Hölscher C, Wolf G, Kurts C, Mittrücker HW, Stahl RA, Panzer U: The IL-23/Th17 axis contributes to renal injury in experimental glomerulonephritis. *J Am Soc Nephrol* 20:969-979, 2009.

Krebs C, Hamming I, Sadaghiani S, Steinmetz OM, Meyer-Schwesinger C, Fehr S, Stahl RA, Garrelds IM, Danser AH, van Goor H, Contrepas A, Nguyen G, Wenzel U: Antihypertensive therapy upregulates renin and (pro)renin receptor in the clipped kidney of Goldblatt hypertensive rats. *Kidney Int* 72:725-730, 2007.

Bicanski B, Wenderdel M, Mertens PR, Senderek J, Panzer U, Steinmetz OM, Stahl RA, Cerrullo G, Diletta Torres D, Schena FP, Zerres K, Floege J. PDGF-B gene single-nucleotide polymorphisms are not predictive for disease onset or progression of IgA nephropathy. *Clin Nephrol* 67:65-72, 2007.

Panzer U, Steinmetz OM, Paust HJ, Meyer-Schwesinger C, Peters A, Turner JE, Zahner G, Heymann F, Kurts C, Hopfer H, Helmchen U, Haag F, Schneider A, Stahl RA: Chemokine receptor CXCR3 mediates T cell recruitment and tissue injury in nephrotoxic nephritis in mice. *J Am Soc Nephrol* 18:2071-2084, 2007.

Jafari C, Panzer U, Steinmetz OM, Zahner G, Stahl RA, Harendza S: Enhanced expression of selenocysteine lyase in acute glomerulonephritis and its regulation by AP-1. *Cell Mol Biol Lett* 11:424-437, 2006.

Panzer U, Schneider A, Steinmetz OM, Wenzel U, Barth P, Reinking R, Becker JU, Harendza S, Zahner G, Fischereder M, Krämer BK, Schlöndorff D, Ostendorf T, Floege J, Helmchen U, Stahl RA: The chemokine receptor 5 Delta32 mutation is associated with increased renal survival in patients with IgA nephropathy. *Kidney Int* 67:75-81, 2005.

3) Übersichtsarbeiten

Panzer U, Turner JE, Steinmetz OM, Kurts C, Johnson RJ, Stahl RA: ISN Forefronts Symposium 2010 in Sylt, Germany: 'Induction and Resolution of Renal Inflammation'. *Kidney Int* 79: 807-813, 2011

Turner JE, Paust HJ, Steinmetz OM, Panzer U. The Th17 immune response in renal inflammation. *Kidney Int* 77:1070-1075, 2010.

Steinmetz OM, Turner JE, Panzer U: Staying on Top of Things Right from the Start: The Obsessive-Compulsive Disorder of Regulatory T Cells. *J Am Soc Nephrol* 21: 6-7, 2009.

Steinmetz OM, Stahl RA, Panzer U: Chemokines and B cells in renal inflammation and allograft rejection. *Front Biosci* (Schol Ed). 1:13-22, 2009.

Turner JE, Steinmetz OM, Stahl RA, Panzer U: Targeting of Th1-associated chemokine receptors CXCR3 and CCR5 as therapeutic strategy for inflammatory diseases. *Mini Rev Med Chem* 7:1089-1096, 2007.

Steinmetz OM, Stahl RA, Panzer U: Formation of lymphoid-like tissue in the kidney--is there a role for chemokines? *Nephrol Dial Transplant* 22:350-352, 2007.

Steinmetz OM, Panzer U, Stahl RA, Wenzel UO: Statin therapy in patients with chronic kidney disease: to use or not to use. *Eur J Clin Invest* 36:519-527, 2006.

Panzer U, Steinmetz OM, Stahl RA, Wolf G: Kidney diseases and chemokines. *Curr Drug Targets* 7:65-80, 2006.

Steinmetz OM, Stahl RA. A new partnership between TGF-beta1 and glucocorticoids in the network of inflammation. *Kidney Int.* 63:2317-2318, 2003.

4) Fallberichte

Langer F, Steinmetz OM, Marx G, Amirkhosravi A, Eifrig B, Bokemeyer C, Brümmendorf T: Aprotinin-associated hemolytic thrombotic microangiopathy in a patient with acute myelogenous leukemia (AML) and systemic coagulopathy. ***Am J Hematol*** 82:1122-1124, 2007.