

PUBLICATIONS

RESEARCH PAPERS (PEER REVIEWED):

1. **Mirjam Schenk**, Sebabrata Mahapatra, Phuongan Le, Hee Jin Kim, Aaron W. Choi, Patrick J. Brennan, John T. Belisle and Robert L. Human NOD2 Recognizes Structurally Unique Muramyl Dipeptides from Mycobacterium leprae. *Infect Immun.* Aug 19;84(9):2429-38 (2016).
2. Susan Realegeno, Kindra Kelly-Scumpia, Angeline Tilly Dang, Jing Lu, Rosane Teles, **Mirjam Schenk**, Phillip T. Liu, Euzenir N. Sarno, Thomas H. Rea, Maria T. Ochoa, Matteo Pellegrini, Robert L. Modlin. S100A12 is part of the antimicrobial network against Mycobacterium leprae in human macrophages. *PLoS Pathogens.* Jun 29;12(6) (2016).
3. Cappuccio A, Zollinger R, **Schenk M**, Walczak A, Servant N, Barillot E, Hupé P, Modlin RL, Soumelis V. Combinatorial code governing cellular responses to complex stimuli. *Nat Commun.* Apr 21;6:6847 (2015).
4. Montoya D, Inkeles MS, Liu PT, Realegeno S, Teles RM, Vaidya P, Munoz MA, **Schenk M**, Swindell WR, Chun R, Zavala K, Hewison M, Adams JS, Horvath S, Pellegrini M, Bloom BR. IL-32 is a molecular marker of a host defense network in human tuberculosis. *Sci Transl Med.* Aug 20;6(250) (2014).
5. **Mirjam Schenk**, Mario Fabri, Stephan R. Krutzik, Delphine J. Lee, David M. Vu, Peter A. Sieling, Dennis Montoya, Philip T. Liu, Robert L. Modlin. IL-1 β triggers the differentiation of macrophages with enhanced capacity to present mycobacterial antigen to T cells. *Immunology.* Sep 3 (2013).
6. Teles RM, Graeber TG, Krutzik SR, Montoya D, **Schenk M**, Lee DJ, Komisopoulou E, Kelly-Scumpia K, Chun R, Iyer SS, Sarno EN, Rea TH, Hewison M, Adams JS, Popper SJ, Relman DA, Stenger S, Bloom BR, Cheng G, Modlin RL. Type I interferon suppresses type II interferon-triggered human anti-mycobacterial responses. *Science.* Mar 22;339(6126):1448-53. (2013).
7. Chung AW, Sieling PA, **Schenk M**, Teles RM, Krutzik SR, Hsu DK, Liu FT, Sarno EN, Rea TH, Stenger S, Modlin RL, Lee DJ. Galectin-3 regulates the innate immune response of human monocytes. *J Infect Dis.* Mar 15;207(6):947-56 (2013).
8. Parvatiyar K, Zhang Z, Teles RM, Ouyang S, Jiang Y, Iyer SS, Zaver SA, **Schenk M**, Zeng S, Zhong W, Liu ZJ, Modlin RL, Liu YJ, Cheng G. The helicase DDX41 recognizes the bacterial secondary messengers cyclic di-GMP and cyclic di-AMP to activate a type I interferon immune response. *Nat Immunol.* Dec;13(12):1155-61 (2012).
9. **Schenk M**, Krutzik SR, Sieling PA, Lee DJ, Teles RM, Ochoa MT, Komisopoulou E, Sarno EN, Rea TH, Graeber TG, Kim S, Cheng G, Modlin RL. NOD2 triggers an IL-32 dependent human dendritic cell program in leprosy. *Nature Med.* Mar 25; 18(4):555-63 (2012).
10. Fabri M, Stenger S, Shin DM, Yuk JM, Liu PT, Realegeno S, Lee HM, Krutzik SR, **Schenk M**, Sieling PA, Teles R, Montoya D, Iyer SS, Bruns H, Lewinsohn DM, Hollis BW, Hewison M, Adams JS, Steinmeyer A, Zügel U, Cheng G, Jo EK, Bloom BR, Modlin RL. Vitamin D is required for IFN- γ -mediated antimicrobial activity of human macrophages. *Sci Transl Med.* Oct 12;3(104) (2011).
11. Mudter J, Yu J, Zufferey C, Brüstle A, Wirtz S, Weigmann B, Hoffman A, **Schenk M**, Galle PR, Lehr HA, Mueller C, Lohoff M, Neurath MF. IRF4 regulates IL-17A promoter activity and controls ROR γ t-dependent Th17 colitis in vivo. *Inflamm Bowel Dis.* Feb 8 (2011).
12. Weber B, Saurer L, **Schenk M**, Dickgreber N, Mueller C. CX3CR1 defines functionally distinct intestinal mononuclear phagocyte subsets which maintain their respective functions during homeostatic and inflammatory conditions. *Eur J Immunol.* Mar;41(3):773-9 (2011).

13. Edfeldt K, Liu PT, Chun R, Fabri M, **Schenk M**, Wheelwright M, Keegan C, Krutzik SR, Adams JS, Hewison M, Modlin RL. T-cell cytokines differentially control human monocyte antimicrobial responses by regulating vitamin D metabolism. *Proc Natl Acad Sci U S A*. Dec 28;107(52):22593-8 (2010).
14. Montoya D, Cruz D, Teles RM, Lee DJ, Ochoa MT, Krutzik SR, Chun R, **Schenk M**, Zhang X, Ferguson BG, Burdick AE, Sarno EN, Rea TH, Hewison M, Adams JS, Cheng G, Modlin RL. Divergence of macrophage phagocytic and antimicrobial programs in leprosy. *Cell Host Microbe*. Oct 22;6(4):343-53 (2009).
15. Philip T. Liu, **Mirjam Schenk**, Valencia P. Walker, Paul W. Dempsey, Melissa Kanchanapoomi, Matthew Wheelwright, Aria Vazirnia, Xiaoran Zhang, Andreas Steinmeyer, Ulrich Zügel, Bruce W. Hollis, Genhong Cheng, Robert L. Modlin. Convergence of IL-1b and VDR Activation Pathways in Human TLR2/1-Induced Antimicrobial Responses. *PLoS One*. Jun 5;4(6):e5810 (2009).
16. Elisa Binda, E., Dominik Erhart, D., **Schenk, M.**, Zufferey, C., Renzulli, P., Mueller, C., Quantitative isolation of mouse and human intestinal intraepithelial lymphocytes by elutriation centrifugation. *J Immunol Methods*. May 15;344(1):26-34 (2009).
17. Mudter, J., Liubov Amoussina, L., **Schenk, M.**, Yu, J., Brustle, A., Weigmann, B., Atreya, R., Wirtz, S., Becker, C., Hoffmann, A., Atreya, I., Biesterfeld, S., Galle, P.R., Lehr, H.A., Rose-John, S., Mueller, C., Lohoff M. & Neurath. M.F. The transcription factor Interferon regulatory factor-4 controls experimental colitis via T cell derived interleukin-6. *J Clin Invest*; Jul;118(7):2415-26 (2008).
18. Research Highlight for Nature Reviews Drug Discovery: **Schenk, M.** et al. TREM-1-expressing intestinal macrophages crucially amplify chronic inflammation in experimental colitis and inflammatory bowel diseases. *Nature Reviews Drug Discovery*. **6**, 868-869 (November 2007)
19. **Schenk, M.**, Bouchon, A., Seibold, F. & Mueller, C. TREM-1 expressing intestinal macrophages crucially amplify chronic inflammation in experimental colitis and inflammatory bowel diseases. *J Clin Invest*. Oct; 117(10):3097-106 (2007).
20. **Schenk, M.**, Bouchon, A., Birrer, S., Colonna, M. & Mueller, C. Macrophages expressing triggering receptor expressed on myeloid cells-1 are underrepresented in the human intestine. *J Immunol*. 174, 517-24 (2005).

REVIEW ARTICLES

1. **Schenk M**, Belisle JT, Modlin RL. TLR2 looks at lipoproteins. *Immunity*. Dec 18;31(6): 847-9 (2009).
2. **Mirjam Schenk** and Christoph Mueller. The mucosal immune system at the gastrointestinal barrier. Review. *Best Practice & Research Clinical Gastroenterology*. 22(3):391-409 (2008).
3. **Mirjam Schenk** and Christoph Mueller. Adaptations of Intestinal Macrophages to an Antigen-Rich Environment. *Seminars in Immunology*. Apr; 19(2):84-93 (2007).

PATENTS

1. A Method for Manufacturing Potent Dendritic Cells, 2011-562-1, UCLA-057PRV, filed 4/15/11.