

RESEARCH OUTPUT LIST

Link to comprehensive publication list:

Orchid ID: [0000-0002-1637-0730](https://orcid.org/0000-0002-1637-0730)

1. Mirela Kremenovic, **Mirjam Schenk**, Delphine J. Lee. Clinical and molecular insights into BCG immunotherapy for melanoma, *JIM*. Accepted, Jan (2020)
2. Keegan, C., Krutzik, S., **Schenk, M.**, Scumpia, P.O., Lu, J., Pang, Y.L.J., Russell, B.S., Lim, K.S., Shell, S., Prestwich, E., Su, D., Elashoff, D., Hershberg, R.M., Bloom, B.R., Belisle, J.T., Fortune, S., Dedon, P.C., Pellegrini, M., Modlin, R.L., Mycobacterium tuberculosis Transfer RNA Induces IL-12p70 via Synergistic Activation of Pattern Recognition Receptors within a Cell Network. *J. Immunol.* 200, 3244–3258 (2018).
3. Sadozai, H., Gruber, T., Hunger, R. E. & **Schenk, M.** Recent Successes and Future Directions in Immunotherapy of Cutaneous Melanoma. *Front. Immunol.* 8, 1617 (2017).
4. Hassan Sadozai, Thomas Gruber, **Mirjam Schenk**. Induction of effective anti-tumor immunity by targeting dendritic cells *in vivo*. Editorial Article. *Madridge Journal of Vaccines.* 1 e1-e4 (2017).
5. **Mirjam Schenk**, Seababata Mahapatra, Phuonganh 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).
6. 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).
7. 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).
8. 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).
9. **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).
10. 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).
11. 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).
12. 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).
13. **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).
14. Fabri, M., Stenger, S., Shin, D.-M., Yuk, J.-M., Liu, P.T., Realegeno, S., Lee, H.-M., Krutzik, S.R., **Schenk, M.**, Sieling, P.A., Teles, R., Montoya, D., Iyer, S.S., Bruns, H., Lewinsohn, D.M., Hollis, B.W., Hewison, M., Adams, J.S., Steinmeyer, A., Zuegel, U., Cheng, G., Jo, E.-K., Bloom, B.R., Modlin, R.L., Vitamin D Is Required for IFN-gamma-Mediated Antimicrobial Activity of Human Macrophages. *Sci. Transl. Med.* 3 (2011).
15. 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.* 41, 773–779 (2011).

16. Mudter, J., Yu, J., Zufferey, C., Bruestle, A., Wirtz, S., Weigmann, B., Hoffman, A., **Schenk, M.**, Galle, P.R., Lehr, H.A., Mueller, C., Lohoff, M., Neurath, M.F., IRF4 Regulates IL-17A Promoter Activity and Controls ROR gamma t-dependent Th17 Colitis In Vivo. *Inflamm. Bowel Dis.* 17, 1343–1358 (2011).
17. Edfeldt, K., Liu, P.T., Chun, R., Fabri, M., **Schenk, M.**, Wheelwright, M., Keegan, C., Krutzik, S.R., Adams, J.S., Hewison, M., Modlin, R.L., T-cell cytokines differentially control human monocyte antimicrobial responses by regulating vitamin D metabolism. *Proc. Natl. Acad. Sci. U.S.A.* 107, 22593–22598 (2010).
18. Montoya, D., Cruz, D., Teles, R.M.B., Lee, D.J., Ochoa, M.T., Krutzik, S.R., Chun, R., **Schenk, M.**, Zhang, X., Ferguson, B.G., Burdick, A.E., Sarno, E.N., Rea, T.H., Hewison, M., Adams, J.S., Cheng, G., Modlin, R.L., Divergence of Macrophage Phagocytic and Antimicrobial Programs in Leprosy. *Cell Host Microbe* 6, 343–353 (2009).
19. Liu, P.T., **Schenk, M.**, Walker, V.P., Dempsey, P.W., Kanchanapoomi, M., Wheelwright, M., Vazirnia, A., Zhang, X., Steinmeyer, A., Zuegel, U., Hollis, B.W., Cheng, G., Modlin, R.L., Convergence of IL-1 beta and VDR Activation Pathways in Human TLR2/1-Induced Antimicrobial Responses. *PLoS One* 4 (2009).
20. **Schenk, M.**, Belisle, J. T. & Modlin, R. L. TLR2 Looks at Lipoproteins. *Immunity* 31, 847–849. (2009).
21. Binda, E., 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* 344, 26–34 (2009).
22. Pittet, V., Juillerat, P., Mottet, C., Felley, C., Ballabeni, P., Burnand, B., Michetti, P., Vader, J.-P., Cohort profile: the Swiss Inflammatory Bowel Disease Cohort Study (SIBDCS). *Int. J. Epidemiol.* 38, 922–931 (2009).
23. **Schenk, M.** & Mueller, C. The mucosal immune system at the gastrointestinal barrier. *BEST Pract. Res. Clin. Gastroenterol.* 22, 391–409. (2008).
24. Mudter, J., Amoussina, L., **Schenk, M.**, Yu, J., Bruestle, A., Weigmann, B., Atreya, R., Wirtz, S., Becker, C., Hoffman, A., Atreya, I., Biesterfeld, S., Galle, P.R., Lehr, H.A., Rose-John, S., Mueller, C., Lohoff, M., Neurath, M.F., The transcription factor IFN regulatory factor-4 controls experimental colitis in mice via T cell-derived IL-6. *J. Clin. Invest.* 118, 2415–2426 (2008).
25. **Schenk, M.** & Mueller, C. Adaptations of intestinal macrophages to an antigen-rich environment. *Semin. Immunol.* 19, 84–93. (2007).
26. **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.* 117, 3097–3106 (2007).
27. **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, 517–524 (2005).