

RIKARD HOLMDAHL PUBLICATIONS 2014

Peer-reviewed articles

- 1: Maghzal GJ, Winter S, Wurzer B, Chong BH, Holmdahl R, Stocker R. Tryptophan catabolism is unaffected in chronic granulomatous disease. *Nature*. 2014 Oct 23;514(7523):E16-7. doi: 10.1038/nature13844. PubMed PMID: 25341792.
- 2: Karikoski M, Marttila-Ichihara F, Elima K, Rantakari P, Hollm an M, Kelkka T, Gerke H, Huovinen V, Irjala H, Holmdahl R, Salmi M, Jalkanen S. Clever-1/Stabilin-1 Controls Cancer Growth and Metastasis. *Clin Cancer Res*. 2014 Oct 15. [Epub ahead of print] PubMed PMID: 25320356.
- 3: Eming R, Hennerici T, B acklund J, Feliciani C, Visconti KC, Willenborg S, Wohde J, Holmdahl R, Sonderstrup G, Hertl M. Pathogenic IgG Antibodies against Desmoglein 3 in Pemphigus Vulgaris Are Regulated by HLA-DRB1*04:02-Restricted T Cells. *J Immunol*. 2014 Nov 1;193(9):4391-9. doi: 10.4049/jimmunol.1401081. Epub 2014 Sep 24. PubMed PMID: 25252957.
- 4: Deffert C, Sch appi MG, Pache JC, Cachat J, Vesin D, Bisig R, Ma Mulone X, Kelkka T, Holmdahl R, Garcia I, Olleros ML, Krause KH. *Bacillus calmette-guerin* infection in NADPH oxidase deficiency: defective mycobacterial sequestration and granuloma formation. *PLoS Pathog*. 2014 Sep 4;10(9):e1004325. doi:10.1371/journal.ppat.1004325. eCollection 2014 Sep. PubMed PMID: 25188296; PubMed Central PMCID: PMC4154868.
- 5: Snir O, Gomez-Cabrero D, Montes A, Perez-Pampin E, Gomez-Reino JJ, Seddighzadeh M, Klich KU, Israelsson L, Ding B, Catrina AI, Holmdahl R, Alfredsson L, Klareskog L, Tegner J, Gonzalez A, Malmstr om V, Padyukov L. Non-HLA genes PTPN22, CDK6 and PADI4 are associated with specific autoantibodies in HLA-defined subgroups of rheumatoid arthritis. *Arthritis Res Ther*. 2014 Aug 20;16(5):414. [Epub ahead of print] PubMed PMID: 25138370.
- 6: Khmaladze Ia, Kelkka T, Guerard S, Wing K, Pizzolla A, Saxena A, Lundqvist K, Holmdahl M, Nandakumar KS, Holmdahl R. Mannan induces ROS-regulated, IL-17A-dependent psoriasis arthritis-like disease in mice. *Proc Natl Acad Sci U S A*. 2014 Sep 2;111(35):E3669-78. doi: 10.1073/pnas.1405798111. Epub 2014 Aug 18. PubMed PMID: 25136095; PubMed Central PMCID: PMC4156700.
- 7: Lemcke S, M oller S, M oller S, Schillert A, Ziegler A, Cepok-Kauffeld S, Comabella M, Montalban X, R ocke T, Nandakumar KS, Hemmer B, Holmdahl R, Pahnke J, Ibrahim SM. Nerve conduction velocity is regulated by the inositol polyphosphate-4-phosphatase II gene. *Am J Pathol*. 2014 Sep;184(9):2420-9. doi: 10.1016/j.ajpath.2014.05.021. Epub 2014 Aug 13. PubMed PMID: 25129256.
- 8: Trocme C, Deffert C, Cachat J, Donati Y, Tissot C, Papacatzis S, Braunersreuther V, Pache JC, Krause KH, Holmdahl R, Barazzone-Argiroffo C, Carnesecchi S. Macrophage-specific NOX2 contributes to the development of lung emphysema through modulation of SIRT1/MMP-9 pathways. *J Pathol*. 2014 Aug 13. doi:10.1002/path.4423. [Epub ahead of print] PubMed PMID: 25116588.

- 9: Ossipova E, Cerqueira CF, Reed E, Kharlamova N, Israelsson L, Holmdahl R, Nandakumar KS, Engström M, Harre U, Schett G, Catrina AI, Malmström V, Sommarin Y, Klareskog L, Jakobsson PJ, Lundberg K. Affinity purified anti-citrullinated protein/peptide antibodies target antigens expressed in the rheumatoid joint. *Arthritis Res Ther*. 2014 Aug 12;16(4):R167. [Epub ahead of print] PubMed PMID: 25112157.
- 10: Lindh I, Snir O, Lönnblom E, Uysal H, Andersson I, Nandakumar KS, Vierboom M, 't Hart B, Malmström V, Holmdahl R. Type II collagen antibody response is enriched in the synovial fluid of rheumatoid joints and directed to the same major epitopes as in collagen induced arthritis in primates and mice. *Arthritis Res Ther*. 2014 Jul 8;16(4):R143. doi: 10.1186/ar4605. PubMed PMID: 25005029; PubMed Central PMCID: PMC4226996.
- 11: Asghar MN, Emani R, Alam C, Helenius TO, Grönroos TJ, Sareila O, Din MU, Holmdahl R, Hönninen A, Toivola DM. In vivo imaging of reactive oxygen and nitrogen species in murine colitis. *Inflamm Bowel Dis*. 2014 Aug;20(8):1435-47. doi: 10.1097/MIB.000000000000118. PubMed PMID: 24983980.
- 12: Bäckdahl L, Ekman D, Jagodic M, Olsson T, Holmdahl R. Identification of candidate risk gene variations by whole-genome sequence analysis of four rat strains commonly used in inflammation research. *BMC Genomics*. 2014 May 21;15:391. doi: 10.1186/1471-2164-15-391. PubMed PMID: 24885425; PubMed Central PMCID: PMC4041999.
- 13: Rodrigues-Sousa T, Ladeirainha AF, Santiago AR, Carvalheiro H, Raposo B, Alarcao A, Cabrita A, Holmdahl R, Carvalho L, Souto-Carneiro MM. Deficient production of reactive oxygen species leads to severe chronic DSS-induced colitis in *Ncf1/p47phox*-mutant mice. *PLoS One*. 2014 May 29;9(5):e97532. doi:10.1371/journal.pone.0097532. eCollection 2014. PubMed PMID: 24873968; PubMed Central PMCID: PMC4038546.
- 14: Sipilä K, Haag S, Denessiouk K, Käpylä J, Peters EC, Denesyuk A, Hansen U, Konttinen Y, Johnson MS, Holmdahl R, Heino J. Citrullination of collagen II affects integrin-mediated cell adhesion in a receptor-specific manner. *FASEB J*. 2014 Aug;28(8):3758-68. doi: 10.1096/fj.13-247767. Epub 2014 May 13. PubMed PMID: 24823363.
- 15: Kelkka T, Kienhöfer D, Hoffmann M, Linja M, Wing K, Sareila O, Hultqvist M, Laajala E, Chen Z, Vasconcelos J, Neves E, Guedes M, Marques L, Krönke G, Helminen M, Kainulainen L, Olofsson P, Jalkanen S, Lahesmaa R, Souto-Carneiro MM, Holmdahl R. Reactive oxygen species deficiency induces autoimmunity with type 1 interferon signature. *Antioxid Redox Signal*. 2014 Dec 1;21(16):2231-45. doi:10.1089/ars.2013.5828. Epub 2014 Jul 29. PubMed PMID: 24787605; PubMed Central PMCID: PMC4224049.
- 16: Schauer C, Janko C, Munoz LE, Zhao Y, Kienhöfer D, Frey B, Lell M, Manger B, Rech J, Naschberger E, Holmdahl R, Krenn V, Harrer T, Jeremic I, Bilyy R, Schett G, Hoffmann M, Herrmann M. Aggregated neutrophil extracellular traps limit inflammation by degrading cytokines and chemokines. *Nat Med*. 2014 May;20(5):511-7. doi: 10.1038/nm.3547. Epub 2014 Apr 28. PubMed PMID: 24784231.
- 17: Holmdahl R, Malmström V, Burkhardt H. Autoimmune priming, tissue attack and chronic inflammation - the three stages of rheumatoid arthritis. *Eur J Immunol*. 2014

Jun;44(6):1593-9. doi: 10.1002/eji.201444486. Epub 2014 May 3. Review. PubMed PMID: 24737176.

18: Tuncel J, Haag S, Yau AC, Norin U, Baud A, Lönnblom E, Maratou K, Ytterberg AJ, Ekman D, Thordardottir S, Johannesson M, Gillett A; EURATRANS Consortium, Stridh P, Jagodic M, Olsson T, Fernandez-Teruel A, Zubarev RA, Mott R, Aitman TJ, Flint J, Holmdahl R. Natural polymorphisms in Tap2 influence negative selection and CD4, α CD8 lineage commitment in the rat. *PLoS Genet.* 2014 Feb 20;10(2):e1004151. doi: 10.1371/journal.pgen.1004151. eCollection 2014 Feb. PubMed PMID: 24586191; PubMed Central PMCID: PMC3930506.

19: Holmdahl R. Studies of preclinical rheumatoid arthritis synovial histology-a comparison of animal models: comment on the article by de Hair et al. *Arthritis Rheumatol.* 2014 Jun;66(6):1682-3. doi: 10.1002/art.38406. PubMed PMID: 24574319.

20: Kessel C, Nandakumar KS, Peters FB, Gauba V, Schultz PG, Holmdahl R. A single functional group substitution in c5a breaks B cell and T cell tolerance and protects against experimental arthritis. *Arthritis Rheumatol.* 2014 Mar;66(3):610-21. doi: 10.1002/art.38237. PubMed PMID: 24574221.

21: Raposo B, Dobritzsch D, Ge C, Ekman D, Xu B, Lindh I, Förster M, Uysal H, Nandakumar KS, Schneider G, Holmdahl R. Epitope-specific antibody response is controlled by immunoglobulin V(H) polymorphisms. *J Exp Med.* 2014 Mar 10;211(3):405-11. doi: 10.1084/jem.20130968. Epub 2014 Feb 17. PubMed PMID: 24534192; PubMed Central PMCID: PMC3949579.

22: Haag S, Schneider N, Mason DE, Tuncel J, Andersson IE, Peters EC, Burkhardt H, Holmdahl R. Identification of new citrulline-specific autoantibodies, which bind to human arthritic cartilage, by mass spectrometric analysis of citrullinated type II collagen. *Arthritis Rheumatol.* 2014 Jun;66(6):1440-9. doi: 10.1002/art.38383. PubMed PMID: 24470447.

23: Hultqvist M, Olofsson P, Wallner FK, Holmdahl R. Pharmacological Potential of NOX2 Agonists in Inflammatory Conditions. *Antioxid Redox Signal.* 2014 Feb 26. [Epub ahead of print] PubMed PMID: 24359237.

24: Shakya AK, Holmdahl R, Nandakumar KS, Kumar A. Polymeric cryogels are biocompatible, and their biodegradation is independent of oxidative radicals. *J Biomed Mater Res A.* 2014 Oct;102(10):3409-18. doi: 10.1002/jbm.a.35013. Epub 2013 Oct 28. PubMed PMID: 24142798.