

## List of publications A. Trkola

---

### I. Original research papers

---

1. Buchacher A, Predl R, Tauer C, Purtscher M, Gruber G, Heider R, Steindl F, **Trkola A**, Jungbauer A, Katinger H (1992) Human Monoclonal-Antibodies against Gp41 and Gp120 as Potential Agent for Passive-Immunitization. *Vaccines 92 : Modern Approaches to New Vaccines Including Prevention of Aids*: 191-195.
2. Vorauer-Uhl K, Skias M, **Trkola A**, Schonhofer W, Unterluggauer F, Schulz P, Jungbauer A (1992) Flocculation: an alternative process to ion-exchange chromatography: (A scale-up study using recombinant human superoxide dismutase as model protein). *Bioseparation 3*: 217-226.
3. Vorauer K, Skias M, **Trkola A**, Schulz P, Jungbauer A (1992) Scale-up of recombinant protein purification by hydrophobic interaction chromatography. *J Chromatogr 625*: 33-39.
4. Muster T, Steindl F, Purtscher M, **Trkola A**, Klima A, Himmeler G, Ruker F, Katinger H (1993) A conserved neutralizing epitope on gp41 of human immunodeficiency virus type 1. *J Virol 67*: 6642-6647.
5. Buchacher A, Predl R, Strutzenberger K, Steinfellner W, **Trkola A**, Purtscher M, Gruber G, Tauer C, Steindl F, Jungbauer A, et al. (1994) Generation of human monoclonal antibodies against HIV-1 proteins; electrofusion and Epstein-Barr virus transformation for peripheral blood lymphocyte immortalization. *AIDS Res Hum Retroviruses 10*: 359-369.
6. Muster T, Guinea R, **Trkola A**, Purtscher M, Klima A, Steindl F, Palese P, Katinger H (1994) Cross-neutralizing activity against divergent human immunodeficiency virus type 1 isolates induced by the gp41 sequence ELDKWAS. *J Virol 68*: 4031-4034.
7. Purtscher M, **Trkola A**, Gruber G, Buchacher A, Predl R, Steindl F, Tauer C, Berger R, Barrett N, Jungbauer A, et al. (1994) A broadly neutralizing human monoclonal antibody against gp41 of human immunodeficiency virus type 1. *AIDS Res Hum Retroviruses 10*: 1651-1658.
8. Moore JP, **Trkola A**, Korber B, Boots LJ, Kessler JA, 2nd, McCutchan FE, Mascola J, Ho DD, Robinson J, Conley AJ (1995) A human monoclonal antibody to a complex epitope in the V3 region of gp120 of human immunodeficiency virus type 1 has broad reactivity within and outside clade B. *J Virol 69*: 122-130.
9. Muster T, Ferko B, Klima A, Purtscher M, **Trkola A**, Schulz P, Grassauer A, Engelhardt OG, Garcia-Sastre A, Palese P, et al. (1995) Mucosal model of immunization against human immunodeficiency virus type 1 with a chimeric influenza virus. *J Virol 69*: 6678-6686.
10. **Trkola A**, Pomales AB, Yuan H, Korber B, Maddon PJ, Allaway GP, Katinger H, Barbas CF, 3rd, Burton DR, Ho DD, et al. (1995) Cross-clade neutralization of primary isolates of human immunodeficiency virus type 1 by human monoclonal antibodies and tetrameric CD4-IgG. *J Virol 69*: 6609-6617.
11. Purtscher M, **Trkola A**, Grassauer A, Schulz PM, Klima A, Dopfer S, Gruber G, Buchacher A, Muster T, Katinger H (1996) Restricted antigenic variability of the epitope recognized by the neutralizing gp41 antibody 2F5. *Aids 10*: 587-593.
12. **Trkola A**, Dragic T, Arthos J, Binley JM, Olson WC, Allaway GP, Cheng-Mayer C, Robinson J, Maddon PJ, Moore JP (1996) CD4-dependent, antibody-sensitive interactions between HIV-1 and its co-receptor CCR-5. *Nature 384*: 184-187.
13. **Trkola A**, Purtscher M, Muster T, Ballaun C, Buchacher A, Sullivan N, Srinivasan K, Sodroski J, Moore JP, Katinger H (1996) Human monoclonal antibody 2G12 defines a distinctive

- neutralization epitope on the gp120 glycoprotein of human immunodeficiency virus type 1. *J Virol* 70: 1100-1108.
14. D'Souza MP, Livnat D, Bradac JA, Bridges SH (1997) Evaluation of monoclonal antibodies to human immunodeficiency virus type 1 primary isolates by neutralization assays: performance criteria for selecting candidate antibodies for clinical trials. the AIDS Clinical Trials Group Antibody Selection Working Group, and **Collaborating Investigators**. *J Infect Dis* 175: 1056-1062.
  15. Fouts TR, Binley JM, **Trkola A**, Robinson JE, Moore JP (1997) Neutralization of the human immunodeficiency virus type 1 primary isolate JR-FL by human monoclonal antibodies correlates with antibody binding to the oligomeric form of the envelope glycoprotein complex. *J Virol* 71: 2779-2785.
  16. Pope M, Frankel SS, Mascola JR, **Trkola A**, Isdell F, Birx DL, Burke DS, Ho DD, Moore JP (1997) Human immunodeficiency virus type 1 strains of subtypes B and E replicate in cutaneous dendritic cell-T-cell mixtures without displaying subtype-specific tropism. *J Virol* 71: 8001-8007.
  17. Connor RI, Korber BT, Graham BS, Hahn BH, Ho DD, Walker BD, Neumann AU, Vermund SH, Mestecky J, Jackson S, Fenamore E, Cao Y, Gao F, Kalams S, Kunstman KJ, McDonald D, McWilliams N, **Trkola A**, Moore JP, Wolinsky SM (1998) Immunological and virological analyses of persons infected by human immunodeficiency virus type 1 while participating in trials of recombinant gp120 subunit vaccines. *J Virol* 72: 1552-1576.
  18. Dragic T, **Trkola A**, Lin SW, Nagashima KA, Kajumo F, Zhao L, Olson WC, Wu L, Mackay CR, Allaway GP, Sakmar TP, Moore JP, Maddon PJ (1998) Amino-terminal substitutions in the CCR5 coreceptor impair gp120 binding and human immunodeficiency virus type 1 entry. *J Virol* 72: 279-285.
  19. Fouts TR, **Trkola A**, Fung MS, Moore JP (1998) Interactions of polyclonal and monoclonal anti-glycoprotein 120 antibodies with oligomeric glycoprotein 120-glycoprotein 41 complexes of a primary HIV type 1 isolate: relationship to neutralization. *AIDS Res Hum Retroviruses* 14: 591-597.
  20. Parren PW, Wang M, **Trkola A**, Binley JM, Purtscher M, Katinger H, Moore JP, Burton DR (1998) Antibody neutralization-resistant primary isolates of human immunodeficiency virus type 1. *J Virol* 72: 10270-10274.
  21. **Trkola A**, Ketas T, Kewalramani VN, Endorf F, Binley JM, Katinger H, Robinson J, Littman DR, Moore JP (1998) Neutralization sensitivity of human immunodeficiency virus type 1 primary isolates to antibodies and CD4-based reagents is independent of coreceptor usage. *J Virol* 72: 1876-1885.
  22. **Trkola A**, Paxton WA, Monard SP, Hoxie JA, Siani MA, Thompson DA, Wu L, Mackay CR, Horuk R, Moore JP (1998) Genetic subtype-independent inhibition of human immunodeficiency virus type 1 replication by CC and CXC chemokines. *J Virol* 72: 396-404.
  23. Gordon CJ, Muesing MA, Proudfoot AE, Power CA, Moore JP, **Trkola A** (1999) Enhancement of human immunodeficiency virus type 1 infection by the CC-chemokine RANTES is independent of the mechanism of virus-cell fusion. *J Virol* 73: 684-694.
  24. Ortiz GM, Nixon DF, **Trkola A**, Binley J, Jin X, Bonhoeffer S, Kuebler PJ, Donahoe SM, Demoitie MA, Kakimoto WM, Ketas T, Clas B, Heymann JJ, Zhang L, Cao Y, Hurley A, Moore JP, Ho DD, Markowitz M (1999) HIV-1-specific immune responses in subjects who temporarily contain virus replication after discontinuation of highly active antiretroviral therapy. *J Clin Invest* 104: R13-18.

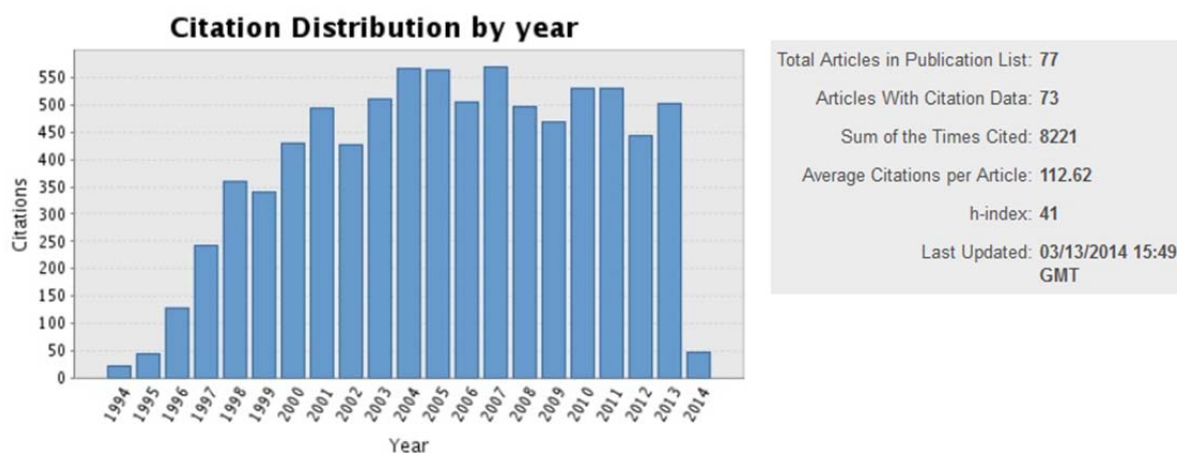
25. **Trkola A**, Gordon C, Matthews J, Maxwell E, Ketas T, Czaplowski L, Proudfoot AE, Moore JP (1999) The CC-chemokine RANTES increases the attachment of human immunodeficiency virus type 1 to target cells via glycosaminoglycans and also activates a signal transduction pathway that enhances viral infectivity. *J Virol* 73: 6370-6379.
26. **Trkola A**, Matthews J, Gordon C, Ketas T, Moore JP (1999) A cell line-based neutralization assay for primary human immunodeficiency virus type 1 isolates that use either the CCR5 or the CXCR4 coreceptor. *J Virol* 73: 8966-8974.
27. Binley JM, **Trkola A**, Ketas T, Schiller D, Clas B, Little S, Richman D, Hurley A, Markowitz M, Moore JP (2000) The effect of highly active antiretroviral therapy on binding and neutralizing antibody responses to human immunodeficiency virus type 1 infection. *J Infect Dis* 182: 945-949.
28. Dragic T, **Trkola A**, Thompson DA, Cormier EG, Kajumo FA, Maxwell E, Lin SW, Ying W, Smith SO, Sakmar TP, Moore JP (2000) A binding pocket for a small molecule inhibitor of HIV-1 entry within the transmembrane helices of CCR5. *Proc Natl Acad Sci U S A* 97: 5639-5644.
29. Jacobson JM, Lowy I, Fletcher CV, O'Neill TJ, Tran DN, Ketas TJ, **Trkola A**, Klotman ME, Maddon PJ, Olson WC, Israel RJ (2000) Single-dose safety, pharmacology, and antiviral activity of the human immunodeficiency virus (HIV) type 1 entry inhibitor PRO 542 in HIV-infected adults. *J Infect Dis* 182: 326-329.
30. Proudfoot AE, Fritchley S, Borlat F, Shaw JP, Vilbois F, Zwahlen C, **Trkola A**, Marchant D, Clapham PR, Wells TN (2001) The BBXB motif of RANTES is the principal site for heparin binding and controls receptor selectivity. *J Biol Chem* 276: 10620-10626.
31. Spenlehauer C, Gordon CA, **Trkola A**, Moore JP (2001) A luciferase-reporter gene-expressing T-cell line facilitates neutralization and drug-sensitivity assays that use either R5 or X4 strains of human immunodeficiency virus type 1. *Virology* 280: 292-300.
32. Strizki JM, Xu S, Wagner NE, Wojcik L, Liu J, Hou Y, Endres M, Palani A, Shapiro S, Clader JW, Greenlee WJ, Tagat JR, McCombie S, Cox K, Fawzi AB, Chou CC, Pugliese-Sivo C, Davies L, Moreno ME, Ho DD, **Trkola A**, Stoddart CA, Moore JP, Reyes GR, Baroudy BM (2001) SCH-C (SCH 351125), an orally bioavailable, small molecule antagonist of the chemokine receptor CCR5, is a potent inhibitor of HIV-1 infection in vitro and in vivo. *Proc Natl Acad Sci U S A* 98: 12718-12723.
33. **Trkola A**, Ketas TJ, Nagashima KA, Zhao L, Cilliers T, Morris L, Moore JP, Maddon PJ, Olson WC (2001) Potent, broad-spectrum inhibition of human immunodeficiency virus type 1 by the CCR5 monoclonal antibody PRO 140. *J Virol* 75: 579-588.
34. Chang TL, Gordon CJ, Roscic-Mrkic B, Power C, Proudfoot AE, Moore JP, **Trkola A** (2002) Interaction of the CC-chemokine RANTES with glycosaminoglycans activates a p44/p42 mitogen-activated protein kinase-dependent signaling pathway and enhances human immunodeficiency virus type 1 infectivity. *J Virol* 76: 2245-2254.
35. Fischer M, Wong JK, Russenberger D, Joos B, Opravil M, Hirschel B, **Trkola A**, Kuster H, Weber R, Gunthard HF (2002) Residual cell-associated unspliced HIV-1 RNA in peripheral blood of patients on potent antiretroviral therapy represents intracellular transcripts. *Antivir Ther* 7: 91-103.
36. **Trkola A**, Kuhmann SE, Strizki JM, Maxwell E, Ketas T, Morgan T, Pugach P, Xu S, Wojcik L, Tagat J, Palani A, Shapiro S, Clader JW, McCombie S, Reyes GR, Baroudy BM, Moore JP (2002) HIV-1 escape from a small molecule, CCR5-specific entry inhibitor does not involve CXCR4 use. *Proc Natl Acad Sci U S A* 99: 395-400.

37. Cilliers T, Nhlapo J, Coetzer M, Orlovic D, Ketas T, Olson WC, Moore JP, **Trkola A**, Morris L (2003) The CCR5 and CXCR4 coreceptors are both used by human immunodeficiency virus type 1 primary isolates from subtype C. *J Virol* 77: 4449-4456.
38. Fischer M, Hafner R, Schneider C, **Trkola A**, Joos B, Joller H, Hirschel B, Weber R, Gunthard HF (2003) HIV RNA in plasma rebounds within days during structured treatment interruptions. *Aids* 17: 195-199.
39. Fischer M, **Trkola A**, Joos B, Hafner R, Joller H, Muesing MA, Kaufman DR, Berli E, Hirschel B, Weber R, Gunthard HF (2003) Shifts in cell-associated HIV-1 RNA but not in episomal HIV-1 DNA correlate with new cycles of HIV-1 infection in vivo. *Antivir Ther* 8: 97-104.
40. Roscic-Mrkic B, Fischer M, Leemann C, Manrique A, Gordon CJ, Moore JP, Proudfoot AE, **Trkola A** (2003) RANTES (CCL5) uses the proteoglycan CD44 as an auxiliary receptor to mediate cellular activation signals and HIV-1 enhancement. *Blood* 102: 1169-1177.
41. **Trkola A**, Kuster H, Leemann C, Ruprecht C, Joos B, Telenti A, Hirschel B, Weber R, Bonhoeffer S, Gunthard HF (2003) Human immunodeficiency virus type 1 fitness is a determining factor in viral rebound and set point in chronic infection. *J Virol* 77: 13146-13155.
42. Tsamis F, Gavrillov S, Kajumo F, Seibert C, Kuhmann S, Ketas T, **Trkola A**, Palani A, Clader JW, Tagat JR, McCombie S, Baroudy B, Moore JP, Sakmar TP, Dragic T (2003) Analysis of the mechanism by which the small-molecule CCR5 antagonists SCH-351125 and SCH-350581 inhibit human immunodeficiency virus type 1 entry. *J Virol* 77: 5201-5208.
43. Billick E, Seibert C, Pugach P, Ketas T, **Trkola A**, Endres MJ, Murgolo NJ, Coates E, Reyes GR, Baroudy BM, Sakmar TP, Moore JP, Kuhmann SE (2004) The differential sensitivity of human and rhesus macaque CCR5 to small-molecule inhibitors of human immunodeficiency virus type 1 entry is explained by a single amino acid difference and suggests a mechanism of action for these inhibitors. *J Virol* 78: 4134-4144.
44. Oxenius A, Price DA, **Trkola A**, Edwards C, Gostick E, Zhang HT, Easterbrook PJ, Tun T, Johnson A, Waters A, Holmes EC, Phillips RE (2004) Loss of viral control in early HIV-1 infection is temporally associated with sequential escape from CD8+ T cell responses and decrease in HIV-1-specific CD4+ and CD8+ T cell frequencies. *J Infect Dis* 190: 713-721.
45. Rusert P, Fischer M, Joos B, Leemann C, Kuster H, Flepp M, Bonhoeffer S, Gunthard HF, **Trkola A** (2004) Quantification of infectious HIV-1 plasma viral load using a boosted in vitro infection protocol. *Virology* 326: 113-129.
46. **Trkola A**, Kuster H, Leemann C, Oxenius A, Fagard C, Furrer H, Battegay M, Vernazza P, Bernasconi E, Weber R, Hirschel B, Bonhoeffer S, Gunthard HF (2004) Humoral immunity to HIV-1: kinetics of antibody responses in chronic infection reflects capacity of immune system to improve viral set point. *Blood* 104: 1784-1792.
47. Aceto L, Karrer U, Grube C, Oberholzer R, Hasse B, Presterl E, Boni J, Kuster H, **Trkola A**, Weber R, Gunthard HF (2005) [Primary HIV-1 infection in Zurich: 2002-2004]. *Schweiz Rundsch Med Prax* 94: 1199-1205.
48. Banki Z, Kacani L, Rusert P, Pruenster M, Wilflingseder D, Falkensammer B, Stellbrink HJ, van Lunzen J, **Trkola A**, Dierich MP, Stoiber H (2005) Complement dependent trapping of infectious HIV in human lymphoid tissues. *Aids* 19: 481-486.
49. Cilliers T, Willey S, Sullivan WM, Patience T, Pugach P, Coetzer M, Papathanasopoulos M, Moore JP, **Trkola A**, Clapham P, Morris L (2005) Use of alternate coreceptors on primary cells by two HIV-1 isolates. *Virology* 339: 136-144.

50. Joos B, **Trkola A**, Fischer M, Kuster H, Rusert P, Leemann C, Boni J, Oxenius A, Price DA, Phillips RE, Wong JK, Hirschel B, Weber R, Gunthard HF (2005) Low human immunodeficiency virus envelope diversity correlates with low in vitro replication capacity and predicts spontaneous control of plasma viremia after treatment interruptions. *J Virol* 79: 9026-9037.
51. Rusert P, Kuster H, Joos B, Misselwitz B, Gujer C, Leemann C, Fischer M, Stiegler G, Katinger H, Olson WC, Weber R, Aceto L, Gunthard HF, **Trkola A** (2005) Virus isolates during acute and chronic human immunodeficiency virus type 1 infection show distinct patterns of sensitivity to entry inhibitors. *J Virol* 79: 8454-8469.
52. **Trkola A**, Kuster H, Rusert P, Joos B, Fischer M, Leemann C, Manrique A, Huber M, Rehr M, Oxenius A, Weber R, Stiegler G, Vcelar B, Katinger H, Aceto L, Gunthard HF (2005) Delay of HIV-1 rebound after cessation of antiretroviral therapy through passive transfer of human neutralizing antibodies. *Nat Med* 11: 615-622.
53. Huber M, Fischer M, Misselwitz B, Manrique A, Kuster H, Niederost B, Weber R, von Wyl V, Gunthard HF, **Trkola A** (2006) Complement lysis activity in autologous plasma is associated with lower viral loads during the acute phase of HIV-1 infection. *PLoS Med* 3: e441.
54. Joos B, **Trkola A**, Kuster H, Aceto L, Fischer M, Stiegler G, Armbruster C, Vcelar B, Katinger H, Gunthard HF (2006) Long-term multiple-dose pharmacokinetics of human monoclonal antibodies (MAbs) against human immunodeficiency virus type 1 envelope gp120 (MAb 2G12) and gp41 (MAbs 4E10 and 2F5). *Antimicrob Agents Chemother* 50: 1773-1779.
55. Joos B, Fischer M, Schweizer A, Kuster H, Boni J, Wong JK, Weber R, **Trkola A**, Gunthard HF (2007) Positive in vivo selection of the HIV-1 envelope protein gp120 occurs at surface-exposed regions. *J Infect Dis* 196: 313-320.
56. Manrique A, Rusert P, Joos B, Fischer M, Kuster H, Leemann C, Niederost B, Weber R, Stiegler G, Katinger H, Gunthard HF, **Trkola A** (2007) In vivo and in vitro escape from neutralizing antibodies 2G12, 2F5, and 4E10. *J Virol* 81: 8793-8808.
57. Huber M, von Wyl V, Ammann CG, Kuster H, Stiegler G, Katinger H, Weber R, Fischer M, Stoiber H, Gunthard HF, **Trkola A** (2008) Potent human immunodeficiency virus-neutralizing and complement lysis activities of antibodies are not obligatorily linked. *J Virol* 82: 3834-3842.
58. Joos B, Fischer M, Kuster H, Pillai SK, Wong JK, Boni J, Hirschel B, Weber R, **Trkola A**, Gunthard HF (2008) HIV rebounds from latently infected cells, rather than from continuing low-level replication. *Proc Natl Acad Sci U S A* 105: 16725-16730.
59. Schweizer A, Rusert P, Berlinger L, Ruprecht CR, Mann A, Corthesy S, Turville SG, Aravantinou M, Fischer M, Robbiani M, Amstutz P, **Trkola A** (2008) CD4-specific designed ankyrin repeat proteins are novel potent HIV entry inhibitors with unique characteristics. *PLoS Pathog* 4: e1000109.
60. Gunthard HF, Huber M, Kuster H, Shah C, Schupbach J, **Trkola A**, Boni J (2009) HIV-1 superinfection in an HIV-2-infected woman with subsequent control of HIV-1 plasma viremia. *Clin Infect Dis* 48: e117-12
61. **Trkola A**, Kuster H, Rusert P, von Wyl V, Leemann C, Weber R, Stiegler G, Katinger H, Joos B, Gunthard HF (2008) In vivo efficacy of human immunodeficiency virus neutralizing antibodies: estimates for protective titers. *J Virol* 82: 1591-1599.
62. Magnus C, Rusert P, Bonhoeffer S, **Trkola A**, Regoes RR (2009) Estimating the stoichiometry of human immunodeficiency virus entry. *J Virol* 83: 1523-1531.

63. Mann AM, Rusert P, Berlinger L, Kuster H, Gunthard HF, **Trkola A** (2009) HIV sensitivity to neutralization is determined by target and virus producer cell properties. *AIDS* 23: 1659-1667.
64. Rusert P, Mann A, Huber M, von Wyl V, Gunthard HF, **Trkola A** (2009) Divergent effects of cell environment on HIV entry inhibitor activity. *Aids* 23: 1319-1327.
65. Haas A, Rehr M, Graw F, Rusert P, Bossart W, Kuster H, **Trkola A**, Gunthard HF, Oxenius A (2010) HIV-1 replication activates CD4+ T cells with specificities for persistent herpes viruses. *EMBO Mol Med* 2: 231-244.
66. Joos B, Rieder P, Fischer M, Kuster H, Rusert P, **Trkola A**, Pillai SK, Wong JK, Weber R, Gunthard HF (2010) Association between specific HIV-1 Env traits and virologic control in vivo. *Infect Genet Evol* 10: 365-372.
67. Pugach P, Krarup A, Gettie A, Kuroda M, Blanchard J, Piatak M, Jr., Lifson JD, **Trkola A**, Robbiani M (2010) In vivo binding and retention of CD4-specific DARPin 57.2 in macaques. *PLoS ONE* 5: e12455.
68. Seitz M, Rusert P, Moehle K, **Trkola A**, Robinson JA (2010) Peptidomimetic inhibitors targeting the CCR5-binding site on the human immunodeficiency virus type-1 gp120 glycoprotein complexed to CD4. *Chem Commun (Camb)* 46: 7754-7756.
69. Riedel T, Ghasparian A, Moehle K, Rusert P, **Trkola A**, Robinson JA (2011) Synthetic virus-like particles and conformationally constrained peptidomimetics in vaccine design. *ChemBiochem* 12: 2829-2836.
70. Ruprecht CR, Krarup A, Reynell L, Mann AM, Brandenburg OF, Berlinger L, Abela IA, Regoes RR, Gunthard HF, Rusert P, **Trkola A** (2011) MPER-specific antibodies induce gp120 shedding and irreversibly neutralize HIV-1. *J Exp Med* 208: 439-454.
71. Rusert P, Krarup A, Magnus C, Brandenburg OF, Weber J, Ehlert AK, Regoes RR, Gunthard HF, **Trkola A** (2011) Interaction of the gp120 V1V2 loop with a neighboring gp120 unit shields the HIV envelope trimer against cross-neutralizing antibodies. *J Exp Med* 208: 1419-1433.
72. Wunderli W, Meerbach A, Guengoer T, Berger C, Greiner O, Caduff R, **Trkola A**, Bossart W, Gerlach D, Schibler M, Cordey S, McKee TA, Van Belle S, Kaiser L, Tapparel C (2011) Astrovirus infection in hospitalized infants with severe combined immunodeficiency after allogeneic hematopoietic stem cell transplantation. *PLoS One* 6: e27483.
73. Abela IA, Berlinger L, Schanz M, Reynell L, Gunthard HF, Rusert P, **Trkola A** (2012) Cell-Cell Transmission Enables HIV-1 to Evade Inhibition by Potent CD4bs Directed Antibodies. *PLoS Pathog* 8: e1002634.
74. Althaus CF, Vongrad V, Niederost B, Joos B, Di Giallonardo F, Rieder P, Pavlovic J, **Trkola A**, Gunthard HF, Metzner KJ, Fischer M (2012) Tailored enrichment strategy detects low abundant small noncoding RNAs in HIV-1 infected cells. *Retrovirology* 9: 27.
75. Mekker A, Tchang VS, Haeberli L, Oxenius A, **Trkola A**, Karrer U (2012) Immune senescence: relative contributions of age and cytomegalovirus infection. *PLoS Pathog* 8: e1002850.
76. Magnus C, Brandenburg OF, Rusert P, **Trkola A**, Regoes RR (2013) Mathematical models: a key to understanding HIV envelope interactions? *J Immunol Methods* 398-399: 1-18.
77. Mann A, Friedrich N, Krarup A, Weber J, Stiegeler E, Dreier B, Pugach P, Robbiani M, Riedel T, Moehle K, Robinson JA, Rusert P, Pluckthun A, **Trkola A** (2013) Conformation-dependent recognition of HIV gp120 by Designed Ankyrin Repeat Proteins provides access to novel HIV entry inhibitors. *J Virol* 87: 5868-5881.

Peer reviewed publications citation metrics  
(Web of Knowledge):



## II. Reviews

---

1. Moore J, **Trkola A** (1997) HIV type 1 coreceptors, neutralization serotypes, and vaccine development. **AIDS Res Hum Retroviruses** 13: 733-736.
2. Moore JP, **Trkola A**, Dragic T (1997) Co-receptors for HIV-1 entry. **Curr Opin Immunol** 9: 551-562.
3. **Trkola A** (2004) HIV-host interactions: vital to the virus and key to its inhibition. **Curr Opin Microbiol** 7: 2004:555-559.
4. Huber M, **Trkola A** (2007) Humoral immunity to HIV-1: neutralization and beyond. **J Intern Med** 262: 5-25.
5. Frost SD, **Trkola A**, Gunthard HF, Richman DD (2008) Antibody responses in primary HIV-1 infection. **Curr Opin HIV AIDS** 3: 45-51.
6. Huber M, Olson WC, **Trkola A** (2008) Antibodies for HIV treatment and prevention: window of opportunity? **Curr Top Microbiol Immunol** 317: 39-66.
7. Abela IA, Reynell L, **Trkola A**. (2010) Therapeutic Antibodies in HIV Treatment - Classical Approaches to Novel Advances. **Curr Pharm Des.** 16(33):3754-66.
8. Reynell L, **Trkola A** (2012) HIV vaccines: an attainable goal? **Swiss Med Wkly** 142: w13535.

## III. Book chapters

---

Proudfoot AEI, Wells TN, **Trkola A**. Antagonism of chemokine receptors in preventing Infection by HIV. In: **Antivirals against AIDS**. Unger RE, Kreuter J, Rübsamen-Waigmann H. (eds.) Marcel Dekker, Inc. 2000; pp 249 –267.

Proudfoot AEI, **Trkola A**, Wells TN. Chemokine Receptors: Therapeutic Targets for Human Immunodeficiency Virus Infectivity. In: **Cytokine Inhibitors**. Ciliberto G., Savino R. (eds.) Marcel Dekker, Inc. 2001; pp 177 – 200.