

ADITYA AMBATI

Curriculum vitae

3165 Porter Dr
Palo Alto,
California-94304, USA
+1-650-660-5143
ambati@stanford.edu

EDUCATION

Ph.D., Medicine, Karolinska Institutet, Stockholm, Sweden.	May 2015.
M.Sc., Biology, Sri Sathya Sai University, Andhra Pradesh, India.	March 2008.
B.Sc., Biology Sri Sathya Sai University, Andhra Pradesh, India.	March 2006.

RESEARCH EXPERIENCE

Post-Doctoral Research fellow (Mignot laboratory), Stanford University, Center for Sleep Sciences and Medicine, Dept. of Psychiatry and Behavioral Sciences, Palo Alto, California, USA.	August 2020.
Research Assistant, Karolinska Institutet, Dept. of Microbiology & Tumor Cell Biology, Stockholm, Sweden.	April 2012.

PUBLICATIONS

1. **Ambati A**, Hillary R, Leu-Semenescu S, Ollila HM, Lin L, During E, Farber N, Rico TJ, Faraco J, Leary E, Goldstein-Piekarski A, Huang Y, Han F, Sivan Y, Lecendreux M, Dodet P, Honda M, Gadoth N, Nevsimalova S, Pizza F, Kanbayahsi T, Peraita Adrados R, Leschziner G, Hasan R, Canellas F, Kume K, Daniilidou M, Bourgin P, Rye D, Vicario JL, Högl B, Hong SC, Plazzi G, Mayer G, Landtblom AM, Dauvilliers Y, Arnulf I, Mignot E. Gene-Environment interactions of TRANK1-region variants with birth difficulties in Kleine-Levin Syndrome. (PNAS revision submitted) 2020.
2. **Ambati A**, Ju YE, Lin L, Olesen AN, Koch H, Hedou JJ, Leary EB, Sempere VP, Mignot E, Taheri S. Proteomic biomarkers of sleep apnea. Sleep. 2020 May 5:zsaa086. doi: 10.1093/sleep/zsaa086. Epub ahead of print. PMID: 32369590.
3. Muñoz-Castrillo S, **Ambati A**, Dubois V, Vogrig A, Joubert B, Rogemond V, Picard G, Lin L, Fabien N, Mignot E, Honnorat J. Primary DQ effect in the association between HLA and neurological syndromes with anti-GAD65 antibodies. J Neurol. 2020

- Jul;267(7):1906-1911. doi: 10.1007/s00415-020-09782-8. Epub 2020 Mar 9. PMID: 32152690.
4. Pothineni VR, Potula HSK, **Ambati A**, Mallajosyula VVA, Sridharan B, Inayathullah M, Ahmed MS, Rajadas J. Azlocillin can be the potential drug candidate against drug tolerant *Borrelia burgdorferi sensu stricto* JLB31. *Sci Rep.* 2020 Mar 2;10(1):3798. doi: 10.1038/s41598-020-59600-4. PMID: 32123189; PMCID: PMC7052277.
 5. Mignot E, **Ambati A**, Luo G. Response to "H1N1 hemagglutinin-specific HLA- DQ6-restricted CD4+ T cells can be readily detected in narcolepsy type 1 patients and healthy controls". *J Neuroimmunol.* 2019 Aug 15;333:476959. doi: 10.1016/j.jneuroim.2019.04.019. Epub 2019 May 1. PMID: 31108400.
 6. Garrett-Bakelman FE, Darshi M, Green SJ, Gur RC, Lin L, Macias BR, McKenna MJ, Meydan C, Mishra T, Nasrini J, Piening BD, Rizzardi LF, Sharma K, Siamwala JH, Taylor L, Vitaterna MH, Afkarian M, Afshinnkoo E, Ahadi S, **Ambati A**, Arya M, Bezdán D, Callahan CM, Chen S, Choi AMK, Chlipala GE, Contrepois K, Covington M, Crucian BE, De Vivo I, Dinges DF, Ebert DJ, Feinberg JI, Gandara JA, George KA, Goutsias J, Grills GS, Hargens AR, Heer M, Hillary RP, Hoofnagle AN, Hook VYH, Jenkinson G, Jiang P, Keshavarzian A, Laurie SS, Lee-McMullen B, Lumpkins SB, MacKay M, Maienschein-Cline MG, Melnick AM, Moore TM, Nakahira K, Patel HH, Pietrzyk R, Rao V, Saito R, Salins DN, Schilling JM, Sears DD, Sheridan CK, Stenger MB, Tryggvadottir R, Urban AE, Vaisar T, Van Espen B, Zhang J, Ziegler MG, Zwart SR, Charles JB, Kundrot CE, Scott GBI, Bailey SM, Basner M, Feinberg AP, Lee SMC, Mason CE, Mignot E, Rana BK, Smith SM, Snyder MP, Turek FW. The NASA Twins Study: A multidimensional analysis of a year-long human spaceflight. *Science.* 2019 Apr 12;364(6436):eaau8650. doi: 10.1126/science.aau8650. PMID: 30975860.
 7. Luo G, **Ambati A**, Lin L, Bonvalet M, Partinen M, Ji X, Maecker HT, Mignot EJ. Autoimmunity to hypocretin and molecular mimicry to flu in type 1 narcolepsy. *Proc Natl Acad Sci U S A.* 2018 Dec 26;115(52):E12323-E12332. doi: 10.1073/pnas.1818150116. Epub 2018 Dec 12. PMID: 30541895; PMCID: PMC6310865.
 8. Stephansen JB, Olesen AN, Olsen M, **Ambati A**, Leary EB, Moore HE, Carrillo O, Lin L, Han F, Yan H, Sun YL, Dauvilliers Y, Scholz S, Barateau L, Hogl B, Stefani A, Hong SC, Kim TW, Pizza F, Plazzi G, Vandi S, Antelmi E, Perrin D, Kuna ST, Schweitzer PK, Kushida C, Peppard PE, Sorensen HBD, Jennum P, Mignot E. Neural network analysis of sleep stages enables efficient diagnosis of narcolepsy. *Nat Commun.* 2018 Dec 6;9(1):5229. doi: 10.1038/s41467-018-07229-3. PMID: 30523329; PMCID: PMC6283836.
 9. Ollila, H.M., Sharon, E., Lin, L., Sinnott-Armstrong, N., **Ambati, A.**, Hillary, R.P., Jolanki, O., Faraco, J., Einen, M., Luo, G. and Zhang, J., 2018. Narcolepsy risk loci are enriched in immune cells and suggest autoimmune modulation of the T cell receptor repertoire. *BioRxiv*, p.373555.
 10. Pothineni VR, Parekh MB, Babar MM, **Ambati A**, Maguire P, Inayathullah M, Kim KM, Tayebi L, Potula HS, Rajadas J. In vitro and in vivo evaluation of cephalosporins for

- the treatment of Lyme disease. *Drug Des Devel Ther.* 2018 Sep 11;12:2915-2921. doi: 10.2147/DDDT.S164966. PMID: 30254421; PMCID: PMC6141111.
11. Luo G, Lin L, Jacob L, Bonvalet M, **Ambati A**, Plazzi G, Pizza F, Leib R, Adams CM, Partinen M, Mignot EJ. Absence of anti-hypocretin receptor 2 autoantibodies in post pandemrix narcolepsy cases. *PLoS One.* 2017 Dec 8;12(12):e0187305. doi: 10.1371/journal.pone.0187305.
 12. Bonvalet M, Ollila HM, **Ambati A**, Mignot E. Autoimmunity in narcolepsy. *Curr Opin Pulm Med.* 2017 Nov;23(6):522-529. doi: 10.1097/MCP.0000000000000426. PMID: 28991006; PMCID: PMC5773260.
 13. Lind A, Freyhult E, Ramelius A, Olsson T, Arnheim-Dahlström L, Lamb F, Khademi M, **Ambati A**, Maeurer M, Lima Bomfim I, Fink K, Fex M, Törn C, Elding Larsson H, Lernmark Å. Antibody Affinity Against 2009 A/H1N1 Influenza and Pandemrix Vaccine Nucleoproteins Differs Between Childhood Narcolepsy Patients and Controls. *Viral Immunol.* 2017 Oct;30(8):590-600. doi: 10.1089/vim.2017.0066. Epub 2017 Aug 10. PMID: 28796576.
 14. Rane L, Rahman S, Magalhaes I, **Ambati A**, Andersson J, Zumla A, Brighenti S, Maeurer MJ. IL-7 δ 5 protein is expressed in human tissues and induces expression of the oxidized low-density lipoprotein receptor 1 (OLR1) in CD14+ monocytes. *Int J Infect Dis.* 2017 Jun;59:29-36. doi: 10.1016/j.ijid.2017.03.001. Epub 2017 Mar 6. PMID: 28279736.
 15. Misra S, Selvam AK, Wallenberg M, **Ambati A**, Matolcsy A, Magalhaes I, Lauter G, Björnstedt M. Selenite promotes all-trans retinoic acid-induced maturation of acute promyelocytic leukemia cells. *Oncotarget.* 2016 Nov 15;7(46):74686-74700. doi: 10.18632/oncotarget.12531. PMID: 27732960; PMCID: PMC5342695.
 16. Meng Q, Liu Z, Rangelova E, Poiret T, **Ambati A**, Rane L, Xie S, Verbeke C, Dadoo E, Del Chiaro M, Löhr M, Segersvärd R, Maeurer MJ. Expansion of Tumor-reactive T Cells From Patients With Pancreatic Cancer. *J Immunother.* 2016 Feb- Mar;39(2):81-9. doi: 10.1097/CJI.000000000000111. PMID: 26849077.
 17. Parida SK, Poiret T, Zhenjiang L, Meng Q, Heyckendorf J, Lange C, **Ambati AS**, Rao MV, Valentini D, Ferrara G, Rangelova E, Dadoo E, Zumla A, Maeurer M. T-Cell Therapy: Options for Infectious Diseases. *Clin Infect Dis.* 2015 Oct 15;61Suppl 3(Suppl 3):S217-24. doi: 10.1093/cid/civ615. PMID: 26409284; PMCID: PMC4583575.
 18. **Ambati A**, Einarsdottir S, Magalhaes I, Poiret T, Bodenstern R, LeBlanc K, Brune M, Maeurer M, Ljungman P. Immunogenicity of virosomal adjuvanted trivalent influenza vaccination in allogeneic stem cell transplant recipients. *Transpl Infect Dis.* 2015 Jun;17(3):371-9. doi: 10.1111/tid.12382. Epub 2015 Jun 1. PMID: 25817044.
 19. **Ambati A**, Boas LS, Ljungman P, Testa L, de Oliveira JF, Aoun M, Colturato V, Maeurer M, Machado CM. Evaluation of pretransplant influenza vaccination in hematopoietic SCT: a randomized prospective study. *Bone Marrow Transplant.* 2015 Jun;50(6):858-64. doi: 10.1038/bmt.2015.47. Epub 2015 Mar 23. PMID: 25798680.

20. **Ambati A**, Poiret T, Svahn BM, Valentini D, Khademi M, Kockum I, Lima I, Arnheim-Dahlström L, Lamb F, Fink K, Meng Q, Kumar A, Rane L, Olsson T, Maeurer M. Increased β -haemolytic group A streptococcal M6 serotype and streptodornase B-specific cellular immune responses in Swedish narcolepsy cases. *J Intern Med*. 2015 Sep;278(3):264-76. doi: 10.1111/joim.12355. Epub 2015 Mar 22. PMID: 25683265.
21. **Ambati A**, Valentini D, Montomoli E, Lapini G, Biuso F, Wenschuh H, Magalhaes I, Maeurer M. H1N1 viral proteome peptide microarray predicts individuals at risk for H1N1 infection and segregates infection versus Pandemrix(®) vaccination. *Immunology*. 2015 Jul;145(3):357-66. doi: 10.1111/imm.12448. Epub 2015 Apr 15. PMID: 25639813; PMCID: PMC4479535.
22. Ahmed RK, Poiret T, **Ambati A**, Rane L, Remberger M, Omazic B, Vudattu NK, Winiarski J, Ernberg I, Axelsson-Robertson R, Magalhaes I, Castelli C, Ringden O, Maeurer M. TCR+CD4-CD8- T cells in antigen-specific MHC class I-restricted T-cell responses after allogeneic hematopoietic stem cell transplantation. *J Immunother*. 2014 Oct;37(8):416-25. doi: 10.1097/CJI.000000000000047. PMID: 25198529.
23. Magalhaes I, Eriksson M, Linde C, Muhammad R, Rane L, **Ambati A**, Axelsson-Robertson R, Khalaj B, Alvarez-Corrales N, Lapini G, Montomoli E, Linde A, Pedersen NL, Maeurer M. Difference in immune response in vaccinated and unvaccinated Swedish individuals after the 2009 influenza pandemic. *BMC Infect Dis*. 2014 Jun 11;14:319. doi: 10.1186/1471-2334-14-319. PMID: 24916787; PMCID: PMC4067073.
24. Lind A, Ramelius A, Olsson T, Arnheim-Dahlström L, Lamb F, Khademi M, **Ambati A**, Maeurer M, Nilsson AL, Bomfim IL, Fink K, Lernmark Å. A/H1N1 antibodies and TRIB2 autoantibodies in narcolepsy patients diagnosed in conjunction with the Pandemrix vaccination campaign in Sweden 2009-2010. *J Autoimmun*. 2014 May;50:99-106. doi: 10.1016/j.jaut.2014.01.031. Epub 2014 Jan 29. PMID: 24485154.

BOOK CHAPTERS

1. Luo G, **Ambati A**, Mignot E, *Primer of PsychoNeuroImmunology Research, Immunological Aspects of Narcolepsy*; chapter 35; Los Angeles, CA: PsychoNeuroImmunology Research Society, 2016. Library of Congress Control Number: 2016940956.

INVITED TALKS

1. Chan Zuckerberg Sleep Symposium, San Francisco, January 2020.
2. Seventh International Symposium on Narcolepsy, Boston, September 2018.

CONFERENCES

1. 34th Annual Meeting of the Associated Professional Sleep Societies, virtual symposium, 2020.

2. American Academy of Neurology, virtual symposium, 2020.
3. 33rd Annual Meeting of the Associated Professional Sleep Societies, San Antonio, USA, 2019.
4. 32nd Annual Meeting of the Associated Professional Sleep Societies, Baltimore, USA, 2018.
5. European Blood and Marrow Transplantation meeting 2015, Istanbul, Turkey, 2015.
6. European Blood and Marrow Transplantation meeting 2014, Milan, Italy, 2014.
7. 54th Inter-science Conference on Antimicrobial Agents and Chemotherapy, Denver, 2013.
8. European Blood and Marrow Transplantation meeting 2013, London, United Kingdom, 2013.
9. European Blood and Marrow Transplantation meeting Infectious disease working party, Prague, Czech Republic, 2011.

GRANTS AND AWARDS

1. Doctoral student 34-month grant from Erasmus Mundus External Cooperation Window India lot 13 to pursue doctoral studies at Karolinska Institutet 2009, \$57,562.
2. Karolinska Institutet virus foundation travel grant 2015.
3. Robert Lundberg travel grant 2015.