

Candidate for a position in the TBNET steering committee



Position of interest: NTM infections

Name: Sandra M. Arend

Current affiliation: Dept. Of Infectious Diseases, Leiden University Medical Center, Leiden, The Netherlands

Qualifications for this position (max. 12 lines):

- **Senior staff member of Dept of Infectious Diseases at a University Hospital**
- **Field of special interest for outpatient clinical care is the diagnosis of latent TB in setting of indication for immunosuppressive treatment**
- **10 year track record of research in the field of development and evaluation of TB immunodiagnosis and TB vaccine development, clinical and immunological studies of NTM (>35 publications)**
- **Was part of the small group that initiated TB NET in 2006. Present at every TB NET meeting since.**
- **Invited speaker regarding TB diagnostics at several international congresses**
- **Extensive experience as peer reviewer for multitude of journals**
- **Key characteristics: critical, open and direct, positive, constructive, creative, focused**

NTM-related publications

Cross-reactive immunity to Mycobacterium tuberculosis DosR-regulon encoded antigens in individuals infected with environmental, non-tuberculous mycobacteria. Lin MY, Reddy TB, Arend SM, Friggen AH, Franken KL, van Meijgaarden KE, Verduyn MJ, Schoolnik GK, Klein MR, Ottenhoff TH. Infect Immun. 2009 Sep 8. [Epub ahead of print]

Diagnosis and treatment of lung infection with nontuberculous mycobacteria.

Arend SM, van Soolingen D, Ottenhoff TH. Curr Opin Pulm Med. 2009 May;15(3):201-8. Review.

Assessment of cross-reactivity between Mycobacterium bovis and M. kansasii ESAT-6 and CFP-10 at the T-cell epitope level. Vordermeier HM, Brown J, Cockle PJ, Franken WP, Drijfhout JW, Arend SM, Ottenhoff TH, Jahans K, Hewinson RG. Clin Vaccine Immunol. 2007 Sep;14(9):1203-9. Epub 2007 Aug 1. Erratum in: Clin Vaccine Immunol. 2007 Nov;14(11):1536. Drijfhout, Jan Wouter [added].

ESAT-6 and CFP-10 in clinical versus environmental isolates of *Mycobacterium kansasii*.
Arend SM, de Haas P, Leyten E, Rosenkrands I, Rigouts L, Andersen P, Mijs W, van Dissel JT, van Soolingen D. *J Infect Dis*. 2005 Apr 15;191(8):1301-10. Epub 2005 Mar 15.

Nontuberculous mycobacterial infection in children: a 2-year prospective surveillance study in the Netherlands. Haverkamp MH, Arend SM, Lindeboom JA, Hartwig NG, van Dissel JT.
Clin Infect Dis. 2004 Aug 15;39(4):450-6. Epub 2004 Jul 23.

Pneumonia caused by *Mycobacterium kansasii* in a series of patients without recognised immune defect. Arend SM, Cerdá de Palou E, de Haas P, Janssen R, Hoeve MA, Verhard EM, Ottenhoff TH, van Soolingen D, van Dissel JT. *Clin Microbiol Infect*. 2004 Aug;10(8):738-48.

Immunological crossreactivity of the *Mycobacterium leprae* CFP-10 with its homologue in *Mycobacterium tuberculosis*. Geluk A, van Meijgaarden KE, Franken KL, Wieles B, Arend SM, Faber WR, Naafs B, Ottenhoff TH. *Scand J Immunol*. 2004 Jan;59(1):66-70.

Tuberculin skin testing and in vitro T cell responses to ESAT-6 and culture filtrate protein 10 after infection with *Mycobacterium marinum* or *M. kansasii*. Arend SM, van Meijgaarden KE, de Boer K, de Palou EC, van Soolingen D, Ottenhoff TH, van Dissel JT. *J Infect Dis*. 2002 Dec 15;186(12):1797-807. Epub 2002 Nov 19.

Epitope mapping of the immunodominant antigen TB10.4 and the two homologous proteins TB10.3 and TB12.9, which constitute a subfamily of the *esat-6* gene family.

Skjøt RL, Brock I, Arend SM, Munk ME, Theisen M, Ottenhoff TH, Andersen P. *Infect Immun*. 2002 Oct;70(10):5446-53.

TB publications in 2006-2009

Variation in T-SPOT.TB spot interpretation between independent observers of different laboratories. Franken WP, Thijsen S, Wolterbeek R, Bouwman JJ, El Bannoudi H, Kik SV, van Dissel JT, Arend SM. *Clin Vaccine Immunol*. 2009 Aug 26. [Epub ahead of print]

Interferon-gamma release assays in immigrant contacts and effect of remote exposure to *Mycobacterium tuberculosis*. Kik SV, Franken WP, Arend SM, Mensen M, Cobelens FG, Kamphorst M, van Dissel JT, Borgdorff MW, Verver S. *Int J Tuberc Lung Dis*. 2009 Jul;13(7):820-8.

LTBI: latent tuberculosis infection or lasting immune responses to *M. tuberculosis*? A TBNET consensus statement. Mack U, Migliori GB, Sester M, Rieder HL, Ehlers S, Goletti D, Bossink A, Magdorf K, Hölscher C, Kampmann B, Arend SM, Detjen A, Bothamley G, Zellweger JP, Milburn H, Diel R, Ravn P, Cobelens F, Cardona PJ, Kan B, Solovic I, Duarte R, Cirillo DM; C. Lange; TBNET. *Eur Respir J*. 2009 May;33(5):956-73.

Interferon-gamma release assays during follow-up of tuberculin skin test-positive contacts. Franken WP, Arend SM, Thijsen SF, Bouwman JJ, Koster BF, van Dissel JT, Bossink AW.
Int J Tuberc Lung Dis. 2008 Nov;12(11):1286-94.

Double-blind randomized Phase I study comparing rESAT-6 to tuberculin as skin test reagent in the diagnosis of tuberculosis infection. Arend SM, Franken WP, Aggerbeck H, Prins C, van Dissel JT, Thierry-Carstensen B, Tingskov PN, Weldingh K, Andersen P.
Tuberculosis (Edinb). 2008 May;88(3):249-61. Epub 2007 Dec 26.

A patient with *de novo* tuberculosis during anti-tumor necrosis factor-alpha therapy illustrating diagnostic pitfalls and paradoxical response to treatment. Arend SM, Leyten EM, Franken WP, Huisman EM, van Dissel JT. *Clin Infect Dis*. 2007 Dec 1;45(11):1470-5. Epub 2007 Oct 25.

T-cell and serological responses to Erp, an exported *Mycobacterium tuberculosis* protein, in tuberculosis patients and healthy individuals. Martinez V, Carcelain G, Badell E, Jouan M, Mauger I, Sellier P, Truffot C, Bricaire F, Arend SM, Ottenhoff T, Autran B, Gicquel B.

BMC Infect Dis. 2007 Jul 26;7:83.

Follow-up study of tuberculosis-exposed supermarket customers with negative tuberculin skin test results in association with positive gamma interferon release assay results. Franken WP, Koster BF, Bossink AW, Thijsen SF, Bouwman JJ, van Dissel JT, Arend SM. Clin Vaccine Immunol. 2007 Sep;14(9):1239-41. Epub 2007 Jul 11.

Discrepancy between *Mycobacterium tuberculosis*-specific gamma interferon release assays using short and prolonged in vitro incubation. Leyten EM, Arend SM, Prins C, Cobelens FG, Ottenhoff TH, van Dissel JT. Clin Vaccine Immunol. 2007 Jul;14(7):880-5. Epub 2007 May 16.

Comparison of Mantoux and QuantiFERON TB Gold tests for diagnosis of latent tuberculosis infection in Army personnel. Franken WP, Timmermans JF, Prins C, Slootman EJ, Dreverman J, Bruins H, van Dissel JT, Arend SM. Clin Vaccine Immunol. 2007 Apr;14(4):477-80. Epub 2007 Feb 14.

Effect of tuberculin skin testing on a *Mycobacterium tuberculosis*-specific interferon-gamma assay. Leyten EM, Prins C, Bossink AW, Thijsen S, Ottenhoff TH, van Dissel JT, Arend SM. Eur Respir J. 2007 Jun;29(6):1212-6. Epub 2007 Jan 10.

Comparison of two interferon-gamma assays and tuberculin skin test for tracing tuberculosis contacts. Arend SM, Thijsen SF, Leyten EM, Bouwman JJ, Franken WP, Koster BF, Cobelens FG, van Houte AJ, Bossink AW. Am J Respir Crit Care Med. 2007 Mar 15;175(6):618-27. Epub 2006 Dec 14.

Is the tuberculin skin test an accurate method of detecting tuberculosis in patients with rheumatoid arthritis? Huizinga TW, Arend SM. Nat Clin Pract Rheumatol. 2006 Apr;2(4):188-9. No abstract available.

Human T-cell responses to 25 novel antigens encoded by genes of the dormancy regulon of *Mycobacterium tuberculosis*. Leyten EM, Lin MY, Franken KL, Friggen AH, Prins C, van Meijgaarden KE, Voskuil MI, Weldingh K, Andersen P, Schoolnik GK, Arend SM, Ottenhoff TH, Klein MR. Microbes Infect. 2006 Jul;8(8):2052-60. Epub 2006 Jun 13.

Use of enzyme-linked immunospot assay with *Mycobacterium tuberculosis*-specific peptides for diagnosis of recent infection with *M. tuberculosis* after accidental laboratory exposure. Leyten EM, Mulder B, Prins C, Weldingh K, Andersen P, Ottenhoff TH, van Dissel JT, Arend SM. J Clin Microbiol. 2006 Mar;44(3):1197-201.

Recognition of stage-specific mycobacterial antigens differentiates between acute and latent infections with *Mycobacterium tuberculosis*. Demissie A, Leyten EM, Abebe M, Wassie L, Aseffa A, Abate G, Fletcher H, Owiafe P, Hill PC, Brookes R, Rook G, Zumla A, Arend SM, Klein M, Ottenhoff TH, Andersen P, Doherty TM; VACSEL Study Group. Clin Vaccine Immunol. 2006 Feb;13(2):179-86.