

Candidate for a position in the TBNET steering committee

Position of interest: Nontuberculous Mycobacterial (NTM) Diseases

Name: Dirk Wagner

Current affiliation: Attendant, Senior physician
Center for Infectious Diseases and Travel Medicine
& Centre of Chronic Immunodeficiency
Medical Clinic, University of Freiburg, Germany
Hugstetter Str. 55, D-79106 Freiburg
Tel. ++49-761-2701819, Fax: -1820
Mail: Dirk.Wagner@uniklinik-freiburg.de
web: <http://www.if-freiburg.de>; cci.uniklinik-freiburg.de



Qualifications for this position:

I am an Infectious Disease specialist and specialist in Internal Medicine with a research background in mostly mycobacterial diseases.

- 1. Clinical:** Since 2002 I have been in charge as a clinician for patients with mycobacterial diseases, I initiated and I am the head of the Mycobacterial Outpatient Clinic at the University of Freiburg, where all adult patients with NTM-infections or –colonization are seen. Also I am the clinically responsible physician at the outpatient department of the Centre of Chronic Immunodeficiency (CCI). I have published case studies and a clinical review on NTM infections ([PMID: 15624889](https://pubmed.ncbi.nlm.nih.gov/15624889/)).
- 2. Research:** I am constantly involved in basic NTM research since 1998 when I was for two years a postdoc at the Kuzell Institute in San Francisco (PI: Luiz Bermudez, Lowell S.Young). My 14 publications solely on NTM infections cover areas of pathogenesis and novel therapeutic approaches. Recently I started a cooperation for the immunodiagnosis of NTM-infections using specific *M. avium*-antigen. I am reviewer for several ID-, pneumology, and microbiology journals often for NTM-related publications. We included 240 immunosuppressed patients in the first TB-NET study project ([TIPS](https://www.tb-net.org)).
- 3. Activities:** I am actively involved in and very much committed to the TB-NET since 2007 (see: <http://www.tb-net.org> ☺) I have been chairing NTM sessions at different European meetings (f.e. ERS 2009). I am cofounder of the study-group for an epidemiological NTM-study at the CCI, the establishment of a European database and biobank for NTM-infected or colonized patients has been accepted as new proposal in the TB-NET. This study-group founded the NTM-NET that has been endorsed as a TB-NET branch at the TB-NET meeting in Vienna 2009. We are organizing an official international kick-off meeting of the NTM-NET in Freiburg Nov. 5-6th (meeting.ntm-net.org).

Motivation to run for this position:

My history shows that I gave and I still have much to give to the TB-NET. It also shows that I have a foundation in NTM-infections which is the research area of my heart. With the newly founded NTM-NET we plan to facilitate collaborative research projects for childhood and adult NTM-infections in Europe. We already initiated several NTM-studies, and as a steering committee member I will evaluate, support and try to actively contribute to future NTM-studies in order to foster research in an area where networking is especially important. Therefore, If elected, together with all (hopefully: many!) other scientists and clinicians involved in NTM-research within the TB-NET, I will work hard to have NTM-research contribute to the impressive TB-NET success story.

Publications in NTM-Infections:

- Li Y, Danelishvili L, **Wagner D**, Petrofsky M, Bermudez LE. Identification of virulence determinants of *Mycobacterium avium* which impact the ability to resist host killing mechanisms. J Med Microbiol **2009**, Sep 10. doi: 10.1099/jmm.0.012864-0
- Rodrigues L, **Wagner D**, Viveiros M, Sampaio D, Couto I, Vavra M, Kern WV, Amaral L. Thioridazine and chlorpromazine inhibition of ethidium bromide efflux in *Mycobacterium avium* and *Mycobacterium smegmatis*. J Antimicrob Chemother. **2008** May;61(5):1076-82.
- Linder K, Zia M, Kern WV, Pfau RK, **Wagner D**. Relapses vs. reactions in multibacillary leprosy: proposal of new relapse criteria. Trop Med Int Health **2008**; 13(3):295-309.
- Wagner D**, Vos M, Buiting AG, Serr A, Bergmans AM, Kern W, Schouls LM. "*Mycobacterium tuberculosis*" infections. Emerg Infect Dis **2006**; 12(3): 532-534.
- Wagner D**, Maser J, Moric I, Vogt S, Kern WV, Bermudez LE. Elemental analysis of the *Mycobacterium avium* phagosome in Balb/c mouse macrophages. Biochem Biophys Res Commun **2006**; 344(4): 1346-1351.
- Wagner D**, Sangari FJ, Parker A, Bermudez LE. *fecB*, a gene potentially involved in iron transport in *Mycobacterium avium*, is not induced within macrophages. FEMS Microbiol Lett **2005**; 247(2):185-191.
- Wagner D**, Maser J, Moric I, Boechat N, Vogt S, Gicquel B, Lai B, Reyat JM, Bermudez L. Changes of the phagosomal elemental concentrations by *Mycobacterium tuberculosis* Mramp. Microbiology **2005**; 151(Pt 1):323-332.
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- Wagner D**, Young LS. Nontuberculous mycobacterial infections: a clinical review. Infection **2004**; 32(5):257-270.
- McGarvey JA, **Wagner D**, Bermudez LE. Differential gene expression in mononuclear phagocytes infected with pathogenic and non-pathogenic mycobacteria. Clin Exp Immunol **2004**; 136(3):490-500.
- Wagner D**, Sangari FJ, Kim S, Petrofsky M, Bermudez LE. *Mycobacterium avium* infection of macrophages results in progressive suppression of interleukin-12 production *in vitro* and *in vivo*. J Leukoc Biol **2002**; 71(1):80-88.
- Broxmeyer L, Sosnowska D, Miltner E, Chacón O, **Wagner D**, McGarvey J, Barletta RG, Bermudez LE. Killing of *Mycobacterium avium* and *Mycobacterium tuberculosis* by a mycobacteriophage delivered by a nonvirulent mycobacterium: a model for phage therapy of intracellular bacterial pathogens. J Infect Dis **2002**; 186(8):1155-1160.
- Limia A, Sangari FJ, **Wagner D**, Bermudez LE. Characterization and expression of *secA* in *Mycobacterium avium*. FEMS Microbiol Lett **2001**; 197(2):151-157.
- Bermudez LE, **Wagner D**, Sosnowska D. Mechanisms of *Mycobacterium avium* pathogenesis. Arch Immunol Ther Exp (Warsz) **2000**; 48(6):521-527.

Other related publications:

- Kern WV, Wagner D, Hirsch HH. [Infections after organ transplantation]. Internist (Berl) **2005**; 46(6):630-642.
- Wagner D, Horster R, Lange B, Lange C. [Evaluation of T-cell interferon-gamma-release assays for the diagnosis of latent and active tuberculosis]. Dtsch Med Wochenschr **2008**; 133(8):354-357.
- Lange C, Grobusch MP, Wagner D. [Extensively drug-resistant tuberculosis]. Dtsch Med Wochenschr **2008**; 133(8):374-376.
- Eker B, Ortmann J, Migliori GB et al. Multidrug- and extensively drug-resistant tuberculosis, Germany. Emerg Infect Dis **2008**; 14(11):1700-1706