

CURRICULUM VITAE (As of 18 January 2019)

Personal Information:

Name: Satoshi MITARAI
Sex: Male
Date of birth: 8 December 1963



Position held: Head, Bacteriology,
Department of Mycobacterium Reference and Research,
Research Institute of Tuberculosis,
Japan Anti-Tuberculosis Association

Professor, Basic Mycobacteriosis,
Graduate School of Biomedical Sciences, Nagasaki University

Education:

March, 1995 Doctor of Philosophy (Ph.D.)
The Institute for Tropical Medicine, Nagasaki University, Nagasaki, Japan
May, 1988 Medical doctor licensed by the Ministry of Welfare
March, 1988 Bachelor of medicine
School of Medicine, Nagasaki University, Nagasaki, Japan

Professional experiences:

Oct., 2012- Professor, Basic Mycobacteriosis,
Graduate School of Biomedical Sciences, Nagasaki University
Sept., 2011- Head, Bacteriology, Department of Mycobacterium Reference and Research,
Research Institute of Tuberculosis, Japan Anti-Tuberculosis Association
Jul., 2003- Chief, Bacteriology Division, Mycobacterium Reference Centre,
Research Institute of Tuberculosis, Japan Anti-Tuberculosis Association
Kiyose, Tokyo, Japan
Jul., 2001- Research Scholar, Clinical Research Division,
Research Institute of Tuberculosis, Japan Anti-Tuberculosis Association
Kiyose, Tokyo, Japan
Jun., 1998 – Microbiology Expert (mycobacteriology)
May 2001 The Infectious Disease Control Project (1989–2001, Zambia)
University Teaching Hospital, Lusaka, Zambia

Professional membership:

1. Japanese Society for Tuberculosis (Trustee, a member of committee for mycobacterial examination standards)
2. Japanese Society of Chemotherapy (Councilor, Editorial Board Member)
3. American Society for Microbiology
4. International Union against Tuberculosis and Lung Diseases
5. Japanese Society for Clinical Microbiology (Councilor, Quality Assurance Board Member)
6. Japanese Society of Tropical Medicine

Scientific Journal Board Membership:

Editorial Board member, Journal of International Mycobacteriology

Editorial Board member, Journal of Microbiological Methods

Rewards:

2004 Incentive award from Japanese Society of Tropical Medicine

2011 Highest Medal of Honour, Ministry of Health, Mongolia

2017 Medal of Honour, National Centre for Communicable Disease, Mongolia

2018 Prize from Japanese Society for Tuberculosis

Publications (recent selected):

1. Tsuyuguchi K, Nagai H, Ogawa K, Matsumoto T, Morimoto K, Takaki A, **Mitarai S**. Performance evaluation of Xpert MTB/RIF in a moderate tuberculosis incidence compared with TaqMan MTB and TRCRapid M.TB J Infect Chemother 2017 Feb; 23(2): 101–106.
2. Morimoto K, Hasegawa K, Izumi K, Namkoong H, Uchimura K, Yoshiyama T, Hoshino Y, Kurashima A, Sokunaga J, Shibuya S, Shimojima M, Ato M, **Mitarai S**. A Laboratory-based Analysis of Nontuberculous Mycobacterial Lung Disease in Japan from 2012 to 2013. Ann Am Thorac Soc 2017 Jan; 14(1): 49-56.
3. Yaita K, Matsunaga M, Tashiro N, Sakai Y, Masunaga K, Miyoshi H, Oshima K, Chikamatsu K, **Mitarai S**, Watanabe H. *Mycobacterium conceptionense* bloodstream infection in a patient with advanced gastric carcinoma. Jpn J Infect Dis 2017 Jan; 70(1): 92–95.
4. Yi L, Yoshiyama T, Okumura M, Morimoto K, Sasaki Y, Shiraishi Y, Ogata H, **Mitarai S**. Linezolid as a potentially effective drug for the treatment of multidrug-resistant tuberculosis in Japan. Jpn J Infect Dis 2017 Jan; 70(1): 96–99.
5. Seto J, Wada T, Suzuki Y, Ikeda T, Mizuta K, **Mitarai S**, and Ahiko T. Convenient PCR method for variable-number tandem-repeat typing of *Mycobacterium tuberculosis* clinical isolates. J Microbiol Method 2017; 139(8): 12–14.
6. Yamada H, Yamaguchi M, Shimizu K, Murayama SY, **Mitarai S**, Sasakawa C, Chibana H. Structome Analysis of *Escherichia coli* cells by serial ultrathin sectioning reveals the precise cell profiles and the ribosome density. Microscopy 2017; 66(4): 283–294.
7. Yi L, Aono A, Chikamatsu K, Igarashi Y, Yamada H, Takaki A, **Mitarai S**. *In vitro* activity of sitafloxacin against *Mycobacterium tuberculosis* with *gyrA/B* mutations isolated in Japan. J Med Microbiol 2017 Jun; 66(6): 770–776.
8. Sakashita K, Fujita A, Takamori M, Nagai T, Matsumoto T, Saito T, Nakagawa T, Ogawa K, Shigeto E, Nakatsumi Y, Ogata H, Goto H, **Mitarai S**. Efficiency of the Lung Flute for sputum induction in patients with presumed pulmonary tuberculosis. Clin Respir J 2017 Aug; 28(8): 1–7.
9. Igarashi Y, Chikamatsu K, Aono A, Yi L, Yamada H, Takaki A, **Mitarai S**. Laboratory evaluation of Anyplex™ II MTB/MDR and MTB/XDR based on multiplex real-time PCR and melting-temperature analysis for identifying *Mycobacterium tuberculosis* and drug resistance. Diag Microb Infect Dis 2017 Dec; 89(4): 276-281.
10. Chikamatsu K, Aono A, Hata H, Igarashi Y, Takaki A, Yamada H, Sakashita K, **Mitarai S**. Evaluation of PyroMark Q24 pyrosequencing as a method for the identification of mycobacteria. BMC Infect Dis 2018; 90: 35–39.
11. Miyake N, Chong Y, Nishida R, Takenaka K, Kato K, Miyamoto T, Aono A, Takaki A, **Mitarai S**, Shimoda S, Shimono N, Akashi K. *Mycobacterium abscessus* and *massiliense* lung infection during macrolide treatment for bronchiolitis obliterans after allogeneic hematopoietic stem cell transplantation. J Infect Chemother. 2018 Jan; 24(1): 78-81.
12. Murase Y, Izumi K, Ohkado A, Aono A, Chikamatsu K, Yamada H, Igarashi Y, Takaki A, **Mitarai S**. Prediction of local tuberculosis transmission predominated by Beijing lineage using a variable-number tandem repeat (VNTR) typing method incorporating a consensus set of hypervariable loci. J Clin Microbiol 2018; 56(1): e01016–17.
13. Matsuda S, Suzuki S, Morimoto K, Aono A, Nishino K, Asakura T, Sasaki Y, Namkoong H, Nishimura T, Ogata H, Hasegawa N, Kurashima A, Ishii M, Tatsumi K, **Mitarai S**, Goto H. *Mycobacterium*

- triplex* pulmonary disease with acquired macrolide resistance in immunocompetent patients. Clin Microbiol Infect 2018; 24(6): 671–672.
14. Seki M, Kim C, Hayakawa S, **Mitarai S**. Recent advances in tuberculosis diagnostics in resource-limited settings. Eur J Clin Microbiol Infect Dis 2018; 37(8) : 1405–1410.
 15. Niitsuma K, Koshiba S, Saitou M, Suzuki T, Chikamatsu K, Takaki A, **Mitarai S**. Use of ultrasonication as a rapid pretreatment method for MALDI-TOF MS of mycobacterial samples. Mycobact Dis 2018; 8(2): 260. DOI: 10.4172/2161-1068.1000260
 16. Nakanaga K, Ogura Y, Toyoda A, Yoshida M, Fukano H, Fujiwara N, Kishi Y, Miyamoto Y, Nakata N, Kazumi Y, Maeda S, Ooka T, Goto M, Tanigawa K, **Mitarai S**, Suzuki K, Ishii N, Ato M, Hayashi T, Hoshino Y. Naturally occurring a loss of a giant plasmid from *Mycobacterium ulcerans* subsp. *shinshuense* makes it non-pathogenic Sci Rep 2018; 8: 8218 DOI:10.1038/s41598-018-26425-1
 17. Morimoto K, Aono A, Murase Y, Sekizuka T, Kurashima A, Takaki A, Sasaki Y, Igarashi Y, Chikamatsu Y, Goto H, Yamada H, Kuroda M, **Mitarai S**. Prevention of aerosol isolation of nontuberculous mycobacterium from patient's bathroom. ERJ Open Res 2018; 4: 00150–2017
 18. Kimura M, Araoka H, Baba H, Okada C, Murase Y, Takaki A, **Mitarai S**, Yoneyama A. First case of sexual transmitted asymptomatic female genital tuberculosis from spousal epididymal tuberculosis diagnosed by active screening. Inter J Infect Dis 2018 Jun 4. pii: S1201-9712(18)34431-X. doi: 10.1016/j.ijid.2018.05.021.
 19. Fukano H, Yoshida M, Kazumi Y, Fujiwara N, Katayama K, Ogura Y, Hayashi T, Miyamoto Y, Fujimoto N, Hongsheng W, Mizumoto C, Koizumi Y, Maeda H, Hiranuma O, **Mitarai S**, Ishii N, Hoshino Y. *Mycobacterium shigaense* sp. nov., a slow-growing, scotochromogenic species, is a member of the *Mycobacterium simiae* complex group. Int J Sys Evol Microbiol 2018 Aug; 68(8): 2437–2442.
 20. Yoshida M, Fukano H, Ogura Y, Kazumi Y, **Mitarai S**, Hayashi T, Hoshino Y. Complete Genome Sequence of *Mycobacterium shigaense*. Genome Announc. 2018 Jun 21;6(25). pii: e00552-18. doi: 10.1128/genomeA.00552-18.
 21. Yamada H, Yamaguchi M, Igarashi Y, Chikamatsu K, Aono A, Murase Y, Morishige Y, Takaki A, Chibana H, **Mitarai S**. *Mycolicobacterium smegmatis* basonym *Mycobacterium smegmatis* expresses morphological phenotypes much more similar to *Escherichia coli* than *Mycobacterium tuberculosis*; in quantitative structome analysis and CryoTEM examination. Frontiers Microbiol 2018 Sep 11; 9: 1992.
 22. Takeda K, Chikamatsu K, Igarashi Y, Murase Y, Aono A, Yamamada H, Takaki A, **Mitarai S**. Six species of non-tuberculosis mycobacteria carrying multiple copies of 16S rRNA. J Microbiol Method 2018; 155: 34–36.
 23. Aono A, Chikamatsu K, Yamada H, Igarashi Y, Murase Y, Takaki A, **Mitarai S**. A simplified pyrazinamidase test for pyrazinamide drug susceptibility in *Mycobacterium tuberculosis*. J Microbiol Method 2018; 154: 52–54.
 24. Morimoto K, Nakagawa T, Asami T, Morino E, Fujiwara H, Hase I, Tsujimoto Y, Izumih K, Hayashi Y, Matsuda S, Murase Y, Yano R, Takasaki J, Betsuyaku T, Aono A, Goto H, Nishimura T, Sasaki Y, Hoshino Y, Kurashima A, Ato M, Ogawa K, Hasegawa N, **Mitarai S**. Clinico-microbiological analysis of 121 patients with pulmonary *Mycobacterium abscessus* complex disease in Japan – an NTM-JRC study with RIT. Respir Med 2018; 145: 14–20.
 25. Aono A, Morimoto K, Chikamatsu K, Yamada H, Igarashi Y, Murase Y, Takaki A, **Mitarai S**. Antimicrobial susceptibility testing of *Mycobacterium abscessus* complex, *Mycobacterium fortuitum*, and

- Mycobacterium chelonae*. J Infect Chemother 2018 Nov 14. pii: S1341-321X(18)30420-3. doi: 10.1016/j.jiac.2018.10.010. [Epub ahead of print]
26. Izumi K, Morimoto K, Hasegawa N, Uchimura K, Ato M, **Mitarai S**. Epidemiology of adults and children treated for nontuberculous mycobacterial pulmonary disease in Japan. Ann ATS 2018 2018 Oct 19. doi: 10.1513/AnnalsATS.201806-366OC. [Epub ahead of print]
 27. **Mitarai S**, Yamada H, Aono A, Chikamatsu K, Higuchi T, Igarashi Y, Takaki A. External quality assessment of anti-tuberculosis drug susceptibility testing for diagnosing extensively drug-resistant *Mycobacterium tuberculosis*. Kekkaku 2019; 94(1): 7–12.
 28. Tsuyuguchi K, Sasaki Y, **Mitarai S**, Kurosawa K, Saito Y, Koh T. Safety, efficacy, and pharmacokinetics of bedaquiline in Japanese patients with pulmonary multidrug-resistant tuberculosis: An interim analysis of an open-label, phase 2 study. Respir Invest (*in press*)