Curriculum Vitae

Subramanian Dhandayuthapani, Ph.D.

Professor of Medicine
Department of Medicine and Oncology
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Education & Training

- Ph.D in Zoology, University of Madras, India
- M.Sc in Zoology, Annamalai University, India
- B.Sc in Zoology, University of Madras, India

Work Experience

- Professor (tenured) Department of Molecular and Translational Medicine, Texas Tech University Health Sciences Center, El Paso, Texas, 79905, USA (2022-2025).
- Director, Biosafety Level 3 (BSL3), Texas Tech University Health Sciences Center, El Paso, Texas, 79905, USA (2015-2025).
- Chair, Institutional Biosafety Committee (IBC), Texas Tech University Health Sciences Center, El Paso, Texas, 79905, USA (2020-2025).
- Associate Professor (tenured), Department of Molecular and Translational Medicine, Texas Tech University Health Sciences Center, El Paso, Texas, 79905, USA (2013- 2022).
- Associate Professor, Department of Microbiology, University of Texas Health Science Center, San Antonio, RAHC Edinburg campus, Edinburg, Texas, 78541, USA (2009-2013).
- Assistant Professor, Department of Microbiology, University of Texas Health Science Center, San Antonio, RAHC Edinburg campus, Edinburg, Texas, 78541, USA (2006- 2009)
- Assistant Professor, Department of Microbiology, University of Texas Health

Science Center, San Antonio, Texas, 78229, USA (2000- 2006).

- Assistant Professor/Research, Department of Microbiology, University of Texas Health Science Center, San Antonio, Texas, 78229, USA (1996- 2000).
- Postdoctoral Fellow, Department of Microbiology, University of Texas Health Science Center, San Antonio, Texas, 78229 USA (1994-1996).
- Postdoctoral Associate, Department of Entomology, Rutgers University,
- New Brunswick, New Jersey, 08901, USA (1993-1994).
- Science and Technology Agency Fellow, National Institute for Leprosy Research, Higahsimurayama-shi, Tokyo, 189, Japan (1991-1993).
- 1987-1991 Senior Research Officer, Division of Laboratories, Central Leprosy Teaching and Research Institute, Chengalpattu, 603001, India (1991-1993).
- Research Officer, Division of Laboratories, Central Leprosy Teaching and Research Institute, Chengalpattu, 603001, India 1986-1987).
- Council of Scientific and Industrial Research Senior Research Fellow, Department of Zoology, University of Madras, Chennai 600005, India (1983-1986).
- University Grants Commission Junior Research Fellow, Department of Zoology, University of Madras, Chepauk, Chennai 600005, India (1980-1983).

Professional Memberships

- American Association of Immunologists (2016-Present)
- Association of Scientists of Indian Origin in America (2005-Present)
- International Organization of Mycoplasmology (1999- Present).
- American Society for Microbiology (1995- Present).
- American Association for the Advancement of Science (1994- Present).

Honors & Awards

- NIH/NIAID R01 grant titled “A novel hyper-immunogenic low virulent BCG vaccine against tuberculosis” (2023-2028); Role, PI.
- NIH/NIAID R15 supplement to grant titled “A novel Quadruple Knockout Mtb vaccine against tuberculosis” (2023-2025); Role, PI.
- NIH/NIAID R15 grant titled “A novel Quadruple Knockout Mtb vaccine against tuberculosis” (2021-2025); Role, PI.
- Associate Editor for the journal “Pathogens,” 2019-present
- Kleberg Foundation grant titled “Development of genetically altered vaccines against tuberculosis” (2015-1019); Role, PI.
- NIH/NIAID R54 grant titled “Mycobacterium tuberculosis proliferation and its regulation” (2015-2017); Role Suaward, PI; Malini Rajagopalan, PI.
- TTUHSC El Paso seed grant titled “Enhancing the Efficacy of DNA Vaccines by Targeting DCs “ (2016-2016), Role, PI.
- NIH/NIAID R21 grant titled “Novel *Bacillus subtilis* spore-based vaccine for tuberculosis” (2012-2015); Role, PI.

- NIH/NIAID R21 grant titled “Promotion of HIV-1 transinfection by *Mycoplasma genitalium*” (2010-2013); Role, PI.
- NIH/NIAID R01 grant titled “Mechanism of mycobacterial antigen processing” (2009-2014); Role, Co-PI; Chinnaswamy Jagannath, PI.
- Borderplex council grant titled “Susceptibility of diabetes patients to tuberculosis” (2007-2009); Role, PI.
- Associate Editor for the journal “Frontiers in Cellular and Infection Microbiology,” 2011-present
- Associate Editor for the journal “Mycobacterial Diseases,” 2011-present
- President-Elect for Division G (Mycoplasmology), American Society for Microbiology, 2016.
- Press release by the American Society for Microbiology for our work on “*Mycoplasma genitalium* promotes HIV transfer and infectivity in an in vitro system’, during the 113th annual meeting held at Denver San Francisco, CO, between My 18-21, 2013
- Press release by NIH/NIAID about our publication on vaccine research in Nature Medicine, 2009.
- Travel award by UK-TX Research Initiative, 2005
- NIH/NIAID R01 grant titled “Biology and pathogenicity of *Mycoplasma genitalium*” (2003-2008); Role Co-PI; Joel Baseman, PI.
- San Antonio Area Foundation grant titled “Survival of *Mycobacterium tuberculosis* in the host” (2003-2004); Role, PI.
- NIH/NIAID R01 grant titled “*Mycoplasma pneumoniae*–Airway Interplay” (2003-2008); Role Co-PI; Joel Baseman, PI.
- UTHSCSA Institutional Research grant titled “Regulation of dormancy in *Mycobacterium tuberculosis”* 2001-2003; Role, PI.
- Japan Health Sciences Foundation grant titled “Oxidative stress response of *Mycobacterium leprae”* 2001-2002; Role PI.
- San Antonio Area Foundation grant titled “Sigma factors and survival *of Mycobacterium tuberculosis”* (2000-2001); Role, PI.
- Japan Health Sciences Foundation grant titled “*Mycobacterium leprae* genes involved in stress response” 2000-2001; Role PI.
- Japan Health Sciences Foundation grant titled “Mycobacterium genes expressed specifically in host cells” 1999-2000; Role, PI
- Japan Health Sciences Foundation Visiting Fellowship, 1999.
- Institutional (UTHSCSA) HHMI grant titled “σ^H and survival of *Mycobacterium tuberculosis”* (1999-2000); Role, PI.
- Travel grant by Sasakawa Foundation for attending the 14th International Congress of Leprosy at Orlando, 1993.
- Science and Technology Agency Fellowship, Government of Japan, 1991
- Council of Scientific and Industrial Research Senior Research Fellowship by Govt. of India, 1983-1983.
- University Grants Commission Junior Research Fellowship (1980-1983)
- Merit Certificate by the Vice Chancellor of Annamalai University (1980)

Research Focus

The development of preventive and therapeutic vaccines for infectious and non-infectious diseases, including cancer, is essential for reducing morbidity and mortality associated with these conditions. Our laboratory has been involved in the development of novel vaccines against tuberculosis (TB) for over 15 years. TB is a chronic infectious disease caused by the bacterium Mycobacterium tuberculosis (Mtb), which claims the lives of more than a million people each year. Currently, Bacille Calmette-Guérin (BCG), an attenuated strain of Mycobacterium bovis, is administered to infants as a preventive vaccine against TB. However, the efficacy of BCG diminishes over time, resulting in only mild protection for older children and adults.

We have previously reported on the development of a recombinant autophagy-inducing BCG vaccine that offers superior protection against tuberculosis compared to the standard BCG vaccine. Presently, we are employing an alternative approach to create attenuated vaccines by rationally deleting specific genes from the chromosome of virulent M. tuberculosis. This strategy is also being utilized to enhance the immunogenicity and effectiveness of the BCG vaccine.

Interestingly, BCG has been used as a therapeutic vaccine for bladder cancer for over fifty years. Our objective is to replace the standard BCG with our genetically altered or improved BCG vaccines for the treatment of bladder cancer and other malignancies. Moreover, we have initiated studies aimed at developing therapeutic vaccines against various types of cancer, utilizing recombinant bacteria as delivery systems. This involves the use of different enterobacteria and the soil bacterium Bacillus subtilis. We have engineered B. subtilis to express cancer antigens on its spore coats, which will be applied in preclinical models for cancer treatment.

Publications

Dr. Dhandayuthapani has made significant contributions to the understanding of the pathogenic mechanisms of tuberculosis and the development of vaccines against tuberculosis, as evidenced by his peer-reviewed publications, listed below.

1. Chacon, J., Faizuddin, F., McKee, J.C., Sheikh, A., Vasquez, V.M., Gadad, S.S., Mayer, G., Siby, S., McCabe, M., **Dhandayuthapani. S**. 2025. Unlocking the Microbial Symphony: The Interplay of Human Microbiota in Cancer Immunotherapy Response. Cancers (Basel) 26, 7(5):813. doi: 10.3390/cancers17050813. (PMID:40075661)

2. Vijayaraghavan, M., Gadad, S.S and **Dhandayuthapani, S**. 2024. Long Non-coding RNA Transcripts in Mycobacterium tuberculosis-Host Interactions. Non-coding RNA Research. 2024 Dec 15;11:281-293. doi: 10.1016/j.ncrna.2024.12.005. eCollection 2025 Apr.PMID: 39926616

3. Reid VA, Ramos EI, Veerapandian R, Carmona A, Gadad SS, **Dhandayuthapani, S.** Differential Expression of lncRNAs in HIV Patients

with TB and HIV-TB with Anti-Retroviral Treatment. Noncoding RNA. 2024 Jul 13;10(4):40. doi: 10.3390/ncrna10040040. PMID: 39051374

4. Mishra, A., Khan, A., Singh, V.K., Glyde, E., Saikolappan, S., Garnica, O., Das, K, Veerapandian, R., **Dhandayuthapani, S#**. and Jagannath, C#. 2024. The ΔfbpAΔsapM candidate vaccine derived from Mycobacterium tuberculosis H37Rv is markedly immunogenic in macrophages and induces robust immunity to tuberculosis in mice. Frontiers in Immunology. 2024 Jun 21;15:1321657. doi: 10.3389/fimmu.2024.1321657. eCollection 2024.PMID: 38975346. ***#Co-corresponding authors***

5. Veerapandian R, Gadad SS, Jagannath C, **Dhandayuthapani S**. 2024. Live Attenuated Vaccines against Tuberculosis: Targeting the Disruption of Genes Encoding the Secretory Proteins of Mycobacteria. Vaccines (Basel). 2024 May 12;12(5):530. doi: 10.3390/vaccines12050530. PMID: 38793781.

6. Ramos, E.I, Veerapandian, R., Das, K., Chacon, J.A., Gadad, S.S., **Dhandayuthapani,** S. 2023. Pathogenic mycoplasmas of humans regulate the long noncoding RNAs in epithelial cells Noncoding RNA Res. 2023 Mar 8;8(3):282-293. doi: 10.1016/j.ncrna.2023.03.002. eCollection 2023 Sep [PMID: 36970372]

7. Veerapandian, R., Ramos, E.I., Vijayaraghavan, M., Sedano, M.J., Carmona, A., Chacon, J.A., Gadad, S.S., **Dhandayuthapani, S**.2023. Mycobacterium smegmatis secreting methionine sulfoxide reductase A (MsrA) modulates cellular processes in mouse macrophages. Biochimie. 2023 Feb 19;211:1-15. doi: 10.1016/j.biochi.2023.02.010. [PMID: 36809827]

8. Kye, Y., Nagineni, L., Gadad, S., Ramirez, F., Riva, H., Fernandez, L., Samaniego, M., Holland, N., Yeh, R., Takigawa, K., **Dhandayuthapani, S**. and Chacon, J. 2022. The identification and clinical applications of mutated antigens in the era of immunotherapy. Cancers (Basel) 14(17):4255. DOI:10.3390/cancers14174255 [PMID:36077792]

9. Le, I., **Dhandayuthapani, S.**, Chacon, J., Eiring, A.M and Gadad, S.S.2022. Harnessing the immune system with cancer vaccines: from prevention to Therapeutics. Vaccines (Basel). 10(5):816. DOI:10.3390/vaccines10050816 [PMID: 35632572]

10. Ramos, E.I., Das, K., Harrison, A., Garcia, A., Gadad, S and **Dhandayuthapani, S**. 2021. *Mycoplasma genitalium* and *M. pneumoniae* regulate a distinct set of protein-coding genes in epithelial cells. Frontiers in Immunology 12:738431.doi:10.3389/fimmu.2021.738431 [PMID:34707609]

11. Patel, Y., Rai, D., Das, K., **Dhandayuthapani, S**. and Mehra, S. 2020. Ethanol in combination with oxidative stress significantly impacts mycobacterial physiology. Journal of Bacteriology Nov. 4 202 (23):e00222-20. doi: 10.1128/JB.00222-20 [PMID:3298928]

12. Das, K., Garnica, O and **Dhandayuthapani, S**. 2020. Methionine sulfoxide reductase A (msrA) modulates cell and protects against *Mycoplasma genitalium* induced cytotoxicity. Free Radical Biology and Medicine May 20;152:323-335. doi: 0.1016/j.freeradbiomed.2020.03.019 25: 3230335 [PMID32222467]

13. Khan, A., Bakhru, P., Saikolappan, S., Das, K., Soudani, E., Singh, C.R., Estrella, J.L., Zhang, D., Pasare, C., Ma, Y., Sun, J., Wang, J., Hunter, R.L., Eissa, N.T., **Dhandayuthapani, S**[#] and Jagannath, C[#].2019. An autophagy-inducing and TLR-2-activating BCG vaccine induces robust protection against tuberculosis in mice. Nature PJ Vaccine 5;4:34 doi: 10.1038/s41541-019-0122-8 PMID: 31396406 ***#Co-corresponding authors***

14. Garnica, O., Das, K, Devasundaram, S and **Dhandayuthapani, S**. 2019.Enhanced delivery of *Mycobacterium tuberculosis* antigens to antigen presenting cells using RVG peptide
Tuberculosis 116:S37-S41 [PMID:31064713]

15. **Dhandayuthapani S**., Actor, J.K. and Graviss, E.A. 2019. Texas tuberculosis research symposium 2018: Research and clinical collaboration within the State of Texas – Moving towards elimination of TB. Tuberculosis 116: S1 [PMID31126719]

16. Das, K., Garnica, O. and **Dhandayuthapani, S**. 2019. Utility of an oxidative stress response system for the expression of recombinant proteins in mycobacteria and for the delivery of *M. tuberculosis* antigens to the phagosomal compartments. Tuberculosis 116:S19-S27 [PMID:31078419]

17. Garnica, O.A., Das, K. and **Dhandayuthapani, S**. 2017. OhrR of *Mycobacterium smegmatis* senses and responds to intracellular organic hydroperoxide stress. Scientific Report 7(1) 3922 doi: 10.1038/s41598-017-03819-1 [PMID28634401]

18. Das, K., Thomas, T., Garnica, O. and **Dhandayuthapani, S**. 2016. Recombinant Bacillus subtilis spores for the delivery of Mycobacterium tuberculosis Ag85B-CFP10 secretory antigens. Tuberculosis 101S: 18-27 [PMID:27727129]

19. Das, K., Thomas, T., Garnica, O. and **Dhandayuthapani, S.** 2016. Modulation of host miRNAs by intracellular pathogens. Frontiers in Cellular and Infection Microbiology. 3; 6:79. doi: 10.3389/fcimb.2016.00079. eCollection 2016 [PMID:27536558]

20. Saikolappan, S., Das, K. and **Dhandayuthapani, S**. 2015. Inactivation of the organic hydroperoxide stress resistance regulator OhrR enhances resistance to oxidative stress and isoniazid in *Mycobacterium smegmatis*. Journal of Bacteriology 197(1): 51-62 [PMID:25313389]

21. Das, K., De la Garza, G., Siwak, E., Scofield, V. and **Dhandayuthapani, S**.2014. *Mycoplasma genitalium* promotes epithelial crossing and PBMC infection by HIV-1. International Journal of Infectious Diseases 23: 31-38 [24661929]

22. Chittoor, G., Arya, R., Vidya, S., Farook, V.S., David, R, Puppala, S., Resendez, R.G., Rivera-Chavira B.E., Leal-Berumen, I., Zenteno-Cuevas, R., López-Alvarenga, J.C, Bastarrachea, R.A., Curran, J.E, **Dhandayuthapani, S**., Gonzalez, L., Blangero, J., Michael H. Crawford, M.H., Vlasich, E.M, Escobedo, L.G, Duggirala, R. 2013. Epidemiologic Investigation of Tuberculosis in a Mexican Population from Chihuahua State, Mexico: A Pilot Study. Tuberculosis 93 (S1):S71-S77 [PMID:24388649]

23. Das, K., Saikolappan, S. and **Dhandayuthapani, S**. 2013. Differential expression of miRNAs by macrophages infected with virulent and avirulent *Mycobacterium tuberculosis*. Tuberculosis 93(S1): S47-S50 [PMID:24388649]

24. **Dhandayuthapani, S** and Jagannath, C. 2013. 3rd Texas Tuberculosis Research Symposium: Strengthening of TB research in the border state. Tuberculosis, 93(S1): S1-S2.[PMID:24388641]

25. Martinez, M., Das, K., Saikolappan, S., Materon, L and **Dhandayuthapani, S.** 2013. A serine/Threonine phosphatase encoded by *MG_207* of *Mycoplasma genitalium* is critical for its virulence. BMC Microbiology. 13(1):44 [PMID:23432936]

26. Saikolappan, S., Khan, A., Sasindran, S.J., Estrella, J., Armitige, L.Y., Jagannath, C. and **Dhandayuthapani, S**.2012. A *ΔfbpA/ΔsapM* double knockout strain of *Mycobacterium tuberculosis* is highly attenuated and immunogenic in macrophages. PLoS ONE 7(5): e36198. [PMID:22574140]

27. Das, K., De La Garza, G., Maffi, S., Saikolappan, S. and **Dhandayuthapani, S**. 2012. Methionine sulfoxide reductase A (MsrA) deficient *Myocplasma genitalium* shows decreased interactions with host cells. PLoS ONE 7(4): e36247. [PMID:22558404]

28. Saikolappan, S., Das, K., Sasindran, S.J., Jagannath, C. and **Dhandayuthapani, S**. 2011. OsmC proteins of *Mycobacterium tuberculosis* and *M. smegmatis* protect organic hydroperoxide stress. Tuberculosis 91: S119-S127 [PMID:22088319]

29. Sasindran, S.J., Saikolappan, S., Scofield, V.L and **Dhandayuthapani, S**. 2011. Biochemical and physiological characterization of the GTP-binding protein Obg of *Mycobacterium tuberculosis.* BMC Microbiology 11 (1): 43[PMID:21352546]

30. Lindsey, D.R., **Dhandayuthapani, S**. and Jagannath, C. 2009. Anti-tuberculosis immunity induced in mice by vaccination with Mycobacterium smegmatis over-expressing antigen 85B is due to the increased influx of IFNγ-positive CD4 cells into the lungs. Tuberculosis 89(S1):S46-S48.[PMID:20006304]

31. **Dhandayuthapani, S.,** Jagannath, C., Nino, C., Saikolappan, S. and Sasindran, S.J. 2009. Methionine sulfoxide reductase B (MsrB) of *Mycobacterium smegmatis* plays a limited role in resisting oxidative stress. Tuberculosis 89(S1):S26-

S32.[PMID:20006300]

32. Saikolappan, S., Sasindran, S., Yu, H.D., Baseman, J.B. and **Dhandayuthapani, S. 2009.** The *Mycoplasma genitalium* Mg_454 gene product resists killing by organic hydroperoxides. Journal of Bacteriology 191: 6675-6682.[PMID:19717589]

33. Jagannath, C., Lindsey, D.R**., Dhandayuthapani, S.,** Yi, Xu., Hunter, R.L.Jr., Eisssa, N.T. 2009. Autophagy enhances the processing and presentation of the immunodominant mycobacterial antigen 85B by mouse macrophages and dendritic cells leading to improved vaccine efficacy. Nature Medicine. 15:267-76.[PMID:19252503]

34. Stalford, S.A., Fascione, M.A., Sasindran, S.J., Chatterjee, D., Dhandayuthapani. S. and Turnbull. W.B. 2009. A natural carbohydrate substrate for Mycobacterium tuberculosis methionine sulfoxide. Chemical Communications 7:110-112 [PMID:19082015]

35. Katti, M.K., Dai, G., Armitige, L.Y., Marrero, C.R., Daniel, R., Singh, C.R., Lindsey, D.R., **Dhandayuthapani, S.**, Hunter, R.L., Jagannath, C. 2008. The ΔfbpA mutant derived from *Mycobacterium tuberculosis* H37Rv has an enhanced susceptibility to intracellular anti-microbial oxidative mechanisms, undergoes limited phagosome maturation and activates macrophages and dendritic cells. Cellular Microbiology 10:1286-1303. [PMID:18248626]

36. **Dhandayuthapani, S**. 2007. Stress response of genes encoding putative stress signaling molecules of *Mycobacterium tuberculosis.* Frontiers in Biosciences. 12: 4676-4681. [PMID:17485404]

37. Sasindran, S.J., Saikolappan, S. and **Dhandayuthapani, S**. 2007. Methionine sulfoxide reductases and virulence of bacterial pathogens. Future Microbiology. 2: 619-630.[PMID:18041903]

38. Daniel, D.S., Dai, G., Singh, C.R., Lindsey, D.R., Smith A.K., **Dhandayuthapani, S**., Hunter, R.L.Jr., and Jagannath, C. 2006. The reduced bactericidal function of complement C5-deficient murine macrophages is associated with defects in the synthesis and delivery of reactive oxygen radicals to mycobacterial phagosomes. Journal of Immunology. 177: 4688-4698.[PMID:16920965]

39. Singh, C.R., Moulton, R.A., Armitige, L.Y., Bidani, A., Snuggs, M., **Dhandayuthapani, S**., Hunter, R.L. and Jagannath, C. 2006. Processing and Presentation of a Mycobacterial Antigen 85B Epitope by Murine Macrophages Is Dependent on the Phagosomal Acquisition of Vacuolar Proton ATPase and In Situ Activation of Cathepsin D. Journal of Immunology. 177:3250-3259.[PMID:16920965]

40. Musatovova, O., **Dhandayuthapani, S.** and Baseman, J.B. 2006. Transcriptional heat shock response in the smallest known self-replicating cell, *Mycoplasma genitalium*. Journal of Bacteriology 188:2845-2855.[PMID:16585746]

41. Parida, B.K., Douglas, T., Nino, C and **Dhandayuthapani, S**. 2005. Interactions of antisigma factor antagonists of *Mycobacterium tuberculosis* in the yeast tow-hybrid system. Tuberculosis 85:347-355.[PMID:16263329]

42. Douglas, T., Daniel, D.S., Parida, B.K., Jagannath, C. and **Dhandayuthapani, S** .2004. Methionine Sulfoxide Reductase A (MsrA) deficiency affects the intracellular survival of a *Mycobacterium smegmatis*. Journal of Bacteriology 186: 3590-3598.[PMID:15150247]

43. Musatovova, O., **Dhandayuthapani, S**. and Baseman, J.B. 2003. Transcriptional analysis of the locus associated with the stability of cytadherence-related proteins in *Mycoplasma genitalium*. FEMS Microbiology Letters 229:73-81.[PMID:14659545]

44. Taylor, A.B., Benglis, D.M., **Dhandayuthapani, S**. and Hart, P.J. 2003. The structure of *Mycobacterium tuberculosis* methionine sulfoxide reductase A in complex with protein bound methionine. Journal of Bacteriology 185:4119-4126.[PMID:12837786]

45. **Dhandayuthapani, S.**, Rasmussen, W.R. and Baseman, J.B. 2002. Stability of cytadherence-related proteins P140/P110 in *Mycoplasma genitalium* requires MG218 and unidentified factors. Archives of Medical Research. 33:1-5.[PMID:11825623]

46. **Dhandayuthapani, S**., Blaylock, M., Bebear, C.M., Rasmussen, W.R. and Baseman, J.B. 2001. Peptide methionine sulfoxide reductase (MsrA) is a virulence determinant in *Mycoplasma genitalium*. Journal of Bacteriology. 183: 5645-5650.[PMID:11544227]

47. **Dhandayuthapani, S**., Rasmussen, W.G. and Baseman, J.B. 1999. Disruption of gene *mg218* of *Mycoplasma genitalium* through homologous recombination leads to an adherence-deficient phenotype. Proceedings of the National Academy of Sciences USA. 96:5227-5232.[PMID:10220448]

48. **Dhandayuthapani, S**. Rasumussen, W.G. and Baseman J.B. 1998. Identification of Mycoplasmal promoters in *Escherichia coli* using a promoter probe vector with green fluorescent protein as a reporter system. Gene. 215:213-222.[PMID:9666132]

49. **Dhandayuthapani, S.,** Mudd, M. and Deretic, V. 1997. Interactions of OxyR with the promoter region of the *oxyR* and *ahpC* genes from *Mycobacterium leprae* and *Mycobacterium tuberculosis*. Journal of Bacteriology. 179:2401-2409.[PMID:9079928]

50. Deretic, V., Pagan-Ramos, E., Zhang, Y., **Dhandayuthapani, S.** and Via, L. 1996. The extreme sensitivity of *Mycobacterium tuberculosis* to the front-line antituberculosis drug isoniazid. Nature Biotechnology. 14:1557-1561.[PMID:9634820]

51. Zhang, Y., **Dhandayuthapani, S.** and Deretic, V. 1996. Molecular basis for the exquisite sensitivity of *Mycobacterium tuberculosis* to isoniazid. Proceedings of the National Academy of Sciences USA. 93:13212-13216.[PMID:8917570]

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57. **Dhandayuthapani, S.**, Banu, M. J. and Kashiwabara, Y. 1994. Cloning and sequence determination of the *tuf* gene coding for Elongation factor Tu of *Mycobacterium leprae*. Journal of Biochemistry. 115:94-99.[PMID:8089081]

58. Banu, M.J., Nellaiappan, K. and **Dhandayuthapani, S**. 1992. Mitochondrial malate dehydrogenase and malic enzyme of *Setaria digitata*: Some properties and effects of drugs and herbal extracts. Japanese Journal of Medical Science and Biology. 45:137-150.[PMID:1291764]

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63. **Dhandayuthapani, S.** and Banu, M.J. 1990. Mitochondrial structure and enzymes associated with electron transport system of *Penetrocephalus ganapatii*. Cytobios. 64:197-202.

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