

Ten best publications

1. Bandyopadhyay P, Pramanick I, Biswas R, Sabarinath PS, Sreedharan S, Singh S, Rajmani R, Laxman S, Dutta S and **Singh A**. S-Adenosylmethionine-responsive cystathionine β -synthase modulates sulfur metabolism and redox balance in *Mycobacterium tuberculosis*. *Sci Adv*. 2022. 8: eabo0097
2. Tripathi A, Anand K, Das M, O’Niel RA, Sabarinath PS, Thakur C, Reddy RRL, Rajmani R, Chandra N, Laxman S and **Singh A**. *Mycobacterium tuberculosis* requires SufT for Fe-S cluster maturation, metabolism, and survival in vivo. *PLoS Pathog*. 2022. 18(4): e1010475.
3. Pal VK, Agrawal R, Rakshit S, Shekar P, Murthy DTN, Vyakarnam A and **Singh A**. Hydrogen sulfide blocks HIV rebound by maintaining mitochondrial bioenergetics and redox Homeostasis. *eLife*. 2021. e68487.
4. Anand K, Tripathi A, Shukla K, Malhotra N, Jamithireddy AK, Jha RK, Chaudhury SN, Rajmani RS, Ramesh A, Nagaraja V, Gopal B, Nagaraju G, Seshasayee ASN, **Singh A**. *Mycobacterium tuberculosis* SufR Responds to Nitric oxide via its 4Fe-4S cluster and Regulates Fe-S cluster Biogenesis for Persistence in Mice. *Redox Biol*. 2021. 102062.
5. Singh S, Ghosh S, Pal VK, Munshi MH, Shekhar P, Murthy DTN, Muges G and **Singh A**. Antioxidant nanozyme counteracts HIV-1 by modulating intracellular redox potential. *EMBO Mol Med*. 2021. e13314.
6. Tyagi P, Pal VK, Agrawal R, Srinivasan S, Singh, S and **Singh A**. *Mycobacterium tuberculosis* reactivates HIV-1 via exosomes-mediated resetting of cellular redox potential and bioenergetics. *mBio*. 2020. 11: e03293.
7. Mishra R, Kohli S, Malhotra N, Bandyopadhyay P, Mehta M, Munshi M, Adiga V, Ahuja VK, Shandil RK, Rajmani RS, Seshasayee ASN and **Singh A**. Targeting redox heterogeneity to counteract drug tolerance in replicating *Mycobacterium tuberculosis*. *Sci Transl Med*. 2019. 11: eaaw6635.
8. Mishra S, Shukla P, Bhaskar A, Anand K, Baloni P, Jha RK, Mohan A, Rajmani RS, Nagaraja V, Chandra N, and **Singh A**. Efficacy of β -lactam/ β -lactamase inhibitor combination is linked to WhiB4-mediated changes in redox physiology of *Mycobacterium tuberculosis*. *eLife*. 2017 May 26(6). pii: e25624.
9. Bhaskar A, Munshi M, Khan SZ, Fatima S, Arya R, Jameel S and **Singh A**. Measuring glutathione redox potential of HIV-1-infected macrophages. *J Biol Chem*. 2015. 290(2): 1020-38.
10. Bhaskar A, Chawla M, Mehta M, Parikh P, Chandra P, Bhawe D, Kumar D, Carroll KS and **Singh A**. Reengineering redox sensitive GFP to measure mycothiol redox potential of *Mycobacterium tuberculosis* during infection. *PLoS Pathog*. 2014. 10(1): e1003902.