

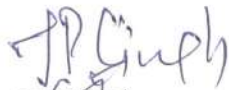
Justification for sponsoring the nomination

Prof Asad Khan is brilliant scientist, has been involved in excellent research over two decades. He is consistently working on antimicrobial resistance which has become a global problem. After COVID-19 its significance has further increased to control such infection from community and hospital settings. He has developed several technologies to control infections caused by multi drug resistant bacteria like, Photo-dynamic therapy and Nano-biotechnology (***Photochem Photobiol-B***, 2017, 2019; ***Photodiagnosis Photodyn Ther***, 2019, 2019^a) and CRISPRi, a gene editing technology was developed to inhibit biofilm mediated infections, by targeting several quorum sensing and biofilm forming genes. This could have been used as to engineer probiotic bacterial strain to treat gut infections as one of the major reservoirs of antibiotic resistant strains in the human microbiome (***Front Immunology***, 2017; ***Front Cell Inf. Microbiology*** 2017; ***J Biomedical Res.***, 2020. He has been known for his discovery of NDM-4 variant in India (***JMM***, 2014).

On his earlier achievements and credentials, he has already been recognized by various national and international scientific organizations to be their members in different capacities. He was invited as Team member in **Joint Research Centre of the European Commission** for Survey on Antimicrobial Resistance. Recognized as **eminent researcher** in the field of Antimicrobial Resistance by Government of India and research Council UK as per the prepared “Scoping Report on Antimicrobial Resistance” in India, which was released on November 2017 during Newton’s Award function in New Delhi. A total of 630 Institutions of the country have been incorporated in this study. Top 10 institutions were identified to be involved in active research on antimicrobial resistance. **Aligarh Muslim University** was placed number 4 in the area of antibiotic resistance research in the country. Report has also recognized **Prof Asad U Khan's** contribution in **Understanding molecular mechanisms of resistance, development of novel agents, diagnostics** as eminent researchers, working in the country. Dr Asad was appointed as **expert member** of steering committee of **UK Academy of Medical Sciences and Hamied Foundation UK-India AMR Programme**. Invited by **International Health Management Association, Inc (IHMA, USA)** for Global Antimicrobial surveillance network (January 2019- December 2019).

Based on his extraordinary research performance in medical science specially to solve the problem of antimicrobial resistance, he has been bestowed by two prestigious awards, **Visitors' Award, 19 and Shri Om Prakash Bhasin Award, 19.**

I am personally acquainted by his research achievement and hence, propose him for the SUN Pharma Research Award.



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