Professor R.K. KOHLI PhD

FRSC, FNA, FASc, FNASc, FNASS, FBS, FNESA Former JC Bose National Fellow (2-terms) Certified Senior Emeritus Ecologist, ESA, USA Former Vice-chancellor, Central University of Punjab Vice-Chancellor Amity University Punjab, Mohali- 140306, India rkkohli@pb.amity.edu rkkohli45@yahoo.com www.rkkohli.com

dated: <u>30-AUG-2023</u>

AUP-Mohali /VC /2023 /335

MEDICAL SCIENCES [Basic Research]

- Mention the category of the award for which the nomination is being submitted: Sun Pharma Science Foundation Research Awards 2023 in Medical Sciences (Basic Research).



- Name of the applicant: Prof. Javed N Agrewala
- Date of birth: **14.05.1961**
- Citizenship (only Indian Scientists, working in India and abroad are eligible for this award. Non-resident Indian Scientists are also eligible for the award). Complete office & residence address with tel. cell no. & email address of the applicant. Office: Indian, Indian Institute of Technology Ropar, Rupnagar-140001, Punjab, India. Tel. 9417869408, jagrewala@iitrpr.ac.in, jagrewala@gmail.com. Residence: H No. A3, Type 6, Indian, Indian Institute of Technology Ropar, Rupnagar-140001, Punjab, India.
- Name of the Nominator. Prof. RK Kohli
- Complete office address with Tel. cell No.& e-mail address of the nominator: Prof. RK Kohli, Vice Chancellor, Amity University, Mohali. Sector 82 A, IT City Rd, Block D, Sahibzada Ajit Singh Nagar, Punjab 140306. Tel: 9872201516, email: rkkohli@pb.amity.edu

Signed Justification for sponsoring the nomination by the nominator.

Beyond any iota of doubt, Dr. Agrewala is an extremely successful scientist nationally and internationally. This is commended by the fact that his work has been honoured by the "topmost award" of Indian Science "Shanti Swarup Bhatnagar" Prize; he is a Fellow of all the three Science Academies of India "Indian National Science Academy", "Indian Academy of Sciences" and "National Academy of Sciences India", prestigious JC Bose Fellowship, National Biosciences Award, etc. Further, based on high-quality work, he was invited as a "Visiting Scientist" at prestigious organizations like "Royal Postgraduate Medical School, UK" and "Trudeau Institute, USA". Furthermore, his findings are published in high-impact journals" like Aging Cell: 2023 [IF:11], Autophagy: 2020, 2021 [IF:16], Cell Mol Life Sci: 2022 [IF:9.2], PloS Pathogen: 2012 [IF: 9.23], Trends Mol Med: 2012 [IF:11.95], J Infect Dis: 2004, 2010, 2011, 2014, 2015 [IF:7.8], J Biol Chem: 2022, 2007, 2013, 2014, 2022 [IF:5.49], J Immunol: 1994, 1998, 2012-[IF:5.8], J Trans Med: 2017, 2018 [IF:8.4], J Proteome Res: 2008, 2020 [IF: 4.46], J Innate Immunity: 2016 [IF:7.4], Eur J Immunol: 1994, 1999, 2020 [IF:6.8], Cancer Immunol Immunother: 2019 [IF:7], ACS Infect Dis: 2021 [IF:5.5], Front Immunol:



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2016b, 2017a, 2017b, 2018a, 2018b, 2019a, 2019b, 2020 [IF:8.8], etc, and endorsed by scientists worldwide by **high citations:** 14601, h-index: 38, i10-index: 91. He has been "**granted several national and international patents**" and transferred a **technology worth "USD 3 million**".

Dr. Agrewala's group has made seminal contributions in the area of novel vaccination strategies against TB by developing an epitope-based chimeric vaccine. The vaccine overcomes the shortcomings associated with BCG. Vaccine imparts enduring immunity and better protection than BCG. This can be a potent future vaccine candidate against TB. This work has attracted internationally renowned scientists like Prof. DC Jackson, University of Melbourne, Australia, Prof. P Andersen, Staten Serum Institute, Denmark. Currently, ICMR is taking this vaccine ahead for clinical trials.

Dr. Agrewala's group has discovered a novel role of 'Caerulomycin A', as an immunosuppressive agent that substantially ameliorates the symptoms associated with autoimmune diseases. He has in-depth deciphered the mechanism of action of Caerulomycin A.

Dr. Agrewala's group has developed an innovative strategy of host-directed therapy by targeting innate immunity molecules. This strategy decreases the dose and duration of lengthy TB drug treatment and effectively kills *Mtb*, and curbs drug resistance in the bacterium.

Dr. Agrewala's group has for the first time demonstrated a novel role of gut microbes in the resistance to TB. The group is working on the identification of gut microbes that can work as an adjunct therapy with drugs in curing TB.

Based on his awards and honours, I honestly feel that Dr. Agrewala's research has been highly appreciated and has reached the pinnacle of achievements. As an unprejudiced witness of his long-standing meritorious career, I strongly recommend Dr. Agrewala's candidature for suitability for the Sun Pharma Science Foundation Research Awards 2023 in Medical Sciences (Basic Research).

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R K Kohli Vice-Chancellor Amity University Punjab, Mohali 140306