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To whom it may concern

My name is Aditya Ambati, Instructor in the department of Psychiatry and Behavioral Sciences at the Stanford Center for Sleep Sciences and Medicine. I have a Ph.D., in medicine from Karolinska Institutet, Stockholm, Sweden and 5 year post-doctoral research experience at Stanford University. I have made critical discoveries of major significance in the field of sleep disorders and immunogenetics with a focus in narcolepsy and Kleine-Levin Syndrome. I have published over 30 peer-reviewed articles in reputed journals such as Science, Proceedings of National Academy of Sciences, Brain and Journal of Neurology among others. I am an editorial board member of BMC immunology and regularly perform invited reviews for various journals in the field of sleep disorders and immunogenetics. Based on my standing in the field and my mentorship of Yash Athma, I am more than happy to write this letter of recommendation as Mr. Athma I believe has the potential to be a promising candidate for biomedical research.

Mr. Athma approached me specifying interest in conducting research in immunogenetics. I was impressed with his extensive knowledge of python and AP statistics and accepted him as an intern in our research programme from May to October-2021. Under my supervision, Mr. Athma was interrogating the immunogenetic architecture of various paraneoplastic syndromes with an emphasis on anti-CASPR2 encephalitis. This syndrome is particularly rare and is characterized by seizures and characteristic presence of auto-antibodies targeted against human protein called CASPR2 (contactin-associated protein2). As there is little knowledge in the underlying pathophysiology of this enigmatic disease, Mr. Athma performed immunogenetic characterization in 80 cases of anti-CASPR2 encephalitis comparing these with 500 control individuals. Mr. Athma discovered a unique HLA signature characterized by the presence of DRB1*11:01 with high frequency (60%) in anti-CASPR2 patients, which I believe will offer answers to patients and families suffering with this disorder. We are

now compiling these findings as a manuscript to be considered for publication in the Journal of Neurology.

Over this period of working closely with Mr. Athma, I observed that Mr. Athma persevered intensely to understand the basics of immunogenetics which he had little knowledge of previously. Further, he quickly adapted his knowledge of computer science to tackle our research question in understanding the immunogenetics of anti-CASPR2 syndrome. He built robust end to end computational pipelines to process genetic sequencing data to statistical routines to derive insights. I saw that he was meticulous, planned and researched extensively to provide most parsimonious solutions. This demonstrated a keen scientific aptitude, commitment to get to the end of a research problem and to present his findings to lay audience.

In conclusion, Mr Athma will be a great asset to your undergraduate programme. Further, provided with the right environment he will I believe make a positive impact in the society. I hope you will give his application due consideration, please do contact me if you have more questions.

Sincerely

A handwritten signature in blue ink, appearing to read 'Aditya Ambati', with a large, stylized flourish extending from the end of the signature.

Aditya Ambati