

It's a pleasure for me to write this recommendation letter to endorse my student researcher, [Student Name], who is aiming to secure an admission at your esteemed University for Masters in Biomedical Engineering. I am currently designated as the Head of the Department of Physiology at the prestigious, All India Institute of Medical Sciences (AIIMS) Delhi, India. In my capacity as a mentor and collaborator for [Student Name]'s project, I can tell you that it was a delight to have worked with him and guide him. Being a doctor and researcher of human physiology, I provided medical guidance on building of a new, digital age ergograph instrument that [Student Name] designed and built.

[Student Name] along with his batchmate took up the task of building a completely new instrument for studying muscle fatigue from scratch while they were still in their junior year at the Indian Institute of Technology, Delhi. The project was a collaboration between the two institutes and [Student Name] played a crucial role, acting as the liaison and taking the lead in designing the instrument. The behind designing such an instrument was to ease the analytical pressure on doctors and bring intelligent data analytics into the realm of muscle fatigue analysis, an area where no such endeavor has been made in the past. [Student Name] took ownership of the problem, and exhibited creativity to build and deliver an instrument as per our requirements that is currently under testing. I am excited that the design has already received a provisional patent from the Indian Patent Office. With his design, the current prototype can be controlled and used entirely through a basic laptop running their proprietary software. I can not only control it, but also gather all the data generated on the instrument on my computer, save it and perform analytics all on the same platform wirelessly. This has provided us with a major boost in our ability to analyze muscle fatigue, study its nature and perform comparative analysis that previously wasn't possible as it was all done literally on a piece of paper. This instrument will simplify diagnosis and medical decisions in the years to come.

During our continued collaboration over the last 3 years, I have seen [Student Name] develop as a team member, an empathetic listener and most importantly as an engineer whose creative thinking and problem-solving expertise will benefit all stakeholders. From the beginning, [Student Name] was always asking questions to dig deeper, taking feedback to reorient himself such that the critical aspects of the design of the instrument were met. This instrument, I believe, is poised to become an everyday essential in our laboratories at AIIMS Delhi and beyond. I commend his ability to be able to take our inputs and feedback and use it well.

I foresee his considerable potential and passion in the field of biomedical devices and instrumentation forging him as a leader in the space. His knowledge of engineering and biology make him well suited to pursue a fruitful career in this industry and solve challenges at scale for India and the world. He has already taken a first small but significant step, where his instrument will be made part of medical teaching for undergraduate students all across India in times to come.

I am very excited for [Student Name]'s future and in my view he is a highly recommended candidate for admission to your esteemed University. I am available at the below contacts for any further information.