

Thomas G. Boyer, Ph.D.
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Re: Letter of Recommendation for Ms. Susivarshini Karthigayan

Dear Admissions Committee Members:

It is with great pleasure that I write this letter without reservation and the strongest possible support for **Ms. Susivarshini Karthigayan**, who has worked in my research laboratory as a research intern for the past two summers (**Summers 2024 and 2025**). Over the course of these two research internships, Susivarshini has demonstrated exceptional curiosity, technical proficiency, and dedication that has far exceeded the expectations for a high school student.

Before I comment more specifically on the excellent qualifications of Susivarshini, I aim to briefly highlight those of my own that I believe render me a qualified judge of Susivarshini's academic intellect and future potential as an outstanding student at your prestigious institution. Currently, I am a Professor in the Department of Molecular Medicine at UT Health San Antonio (UTHSA). For the past 25 years at UTHSA, I have directed an active, NIH-funded research program focused on eukaryotic gene regulation and signaling in developmental and oncogenic signaling. In addition to research faculty (2) and postdoctoral fellows (15), I have directly supervised 19 graduate students (17 PhD and 2 MS), 8 undergraduate students, and I have mentored over 230 additional graduate students through a variety of roles, including rotating laboratory supervisor and qualifying and thesis examination committee member. Additionally, I have served my profession through scientific peer review and my university, school, and community through both leadership roles and membership on numerous committees. Accordingly, I believe that I am suitably qualified to comment on Susivarshini's academic potential as well as her serious and committed work ethic, and I am most appreciative of the opportunity to render an evaluation relevant to her pending admission to your institution.

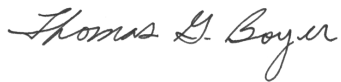
During her time in the lab, Susivarshini mastered a variety of fundamental and advanced molecular biology techniques, including **cell culture, DNA and RNA isolation, polymerase chain reaction (PCR), quantitative PCR (qPCR), and Western blotting**. She also gained hands-on experience in **data analysis and experimental troubleshooting**, showing both precision and critical thinking. Notably, she contributed to a project aimed at **measuring the length of DNA fibers to understand the progression of replication forks**—a technically demanding and conceptually advanced aspect of our research.

Her meticulous work, persistence, and ability to quickly grasp complex biological concepts made her an integral part of our team. Susivarshini's contributions were substantial enough to merit **co-authorship on a research article that has been submitted to a high-impact, peer-reviewed journal**, which is a remarkable accomplishment for a student at her stage.

Beyond her technical skills, Susivarshini consistently impressed me with her enthusiasm for science, thoughtful questions, and collaborative spirit. She approaches challenges with maturity and curiosity, and her attention to detail is paired with an eagerness to learn and improve. I am confident that she will bring the same level of excellence and drive to her future academic and research endeavors.

On a personal level, Susivarshini is mature, warm, and genial. During her tenure in the laboratory, she was a constant positive motive force and an engaging team member with a wonderful sense of humor. Although very independent, she nonetheless worked exceptionally well as part of a team. She readily sought and offered advice and was quite popular among other students and senior members of my research team. In sum, I give Susivarshini my highest recommendation. She stands out as a bright, motivated, and promising young scientist, and I have no doubt she will make significant contributions to any program lucky enough to attract her.

Very Sincerely Yours,

A handwritten signature in cursive script that reads "Thomas G. Boyer".

Thomas G. Boyer, Ph. D.
Professor of Molecular Medicine