**Recommendation for Zachary (Zach) Lakkis**

Never before have I met a student so passionate about his research and its implications for improving the lives of others. Since my first encounter with Zach over three years ago, I found his excitement contagious as he discussed his current research. Zach possesses an incredible work ethic, is highly disciplined, and bears a level of intellectual curiosity that I have rarely seen in other students. As Zach’s counselor, I can attest to his humble and compassionate nature, strong critical thinking skills, and high level of initiative and motivation.

Zach’s transcript speaks for itself; he has excelled in the most rigorous courses Fox Chapel offers its students. He ranks in the first decile of students in his class and consistently seeks opportunities to challenge himself intellectually. Zach will complete all levels of AP science and math offered at Fox Chapel by graduation as well as the highest levels of AP coursework offered in Latin, English and Social Studies. While Zach hopes to major in Biology, he craves a liberal arts learning environment that will give him a well-rounded education, furthering his ability to think critically and communicate effectively. In addition to his rigorous course load, Zach dedicates countless hours to exploring the hard questions, particularly in researching the cure for cancer. As a student technician in the laboratory of Greg Delgoffe, PhD, at UPCI for his 9th & 10th grade summers, Zach focused on a genetics-based project to enhance tumor cell immunotherapy. Zach’s passion for his research led him to continue independent study throughout the school year. Zach’s continued project “Cell Sabotage: A Genetic Weapon Against Cancer” led to numerous awards and accolades, including the Carnegie Mellon University DNA Zone Award and Society for In Vitro Biology Science Fair Award to the first and second place awards at PJAS and PRSEF. Zachary was even selected to present this research as a featured speaker at the TEDx Youth Blue Slide Park series. This past summer, Zach’s research was selected for abstract presentation and publication at the 2018 in Vitro Biology Meeting: “Using CRISPR-Cas to Edit RNA in Living Cells: A Novel Approach to Targeting Cancer.” Finally, Zach just attended Yale University’s summer session, engaging in coursework while conducting research in the Department of Immunobiology. I am privileged to work with many amazing students; however, Zach is the type of student that makes me pause and consider just how significant and life changing his future contributions to society will be.

I am confident that Zach will also make an immediate impression on your campus, engaging with and giving back to the school and community. Throughout high school, I’ve often asked Zach when he finds time to sleep. In addition to his research, Zach is passionate about music and his club, Fox Chapel Science Fair Club. An accomplished violinist, Zach has earned many accolades and awards for his skill, performing with the Pittsburgh Youth Symphony Orchestra and Youth Chamber Connection. Zach loves sharing his music with others, and he plays monthly at nursing homes in our community. Wanting to share his love of science with others, Zach started the Science Fair Club last year. He makes frequent trips to the middle school with other students to mentor and teach interested students, helping them get involved in scientific research and presentation. Zach is an active member of clubs from Model UN to Latin Club and the Mu Alpha Theta Club. Our school and its student organizations are better for Zach’s many contributions.

In closing, it is my great pleasure to recommend Zachary Lakkis for admission to your esteemed university. It is truly an honor to work with Zach as his school counselor; he is an amazing young man. I applaud Zach’s continual efforts to quench his intellectual curiosity, and his desire to use his scientific research to cure cancer.

Sincerely,

Rachel Machen

School Counselor