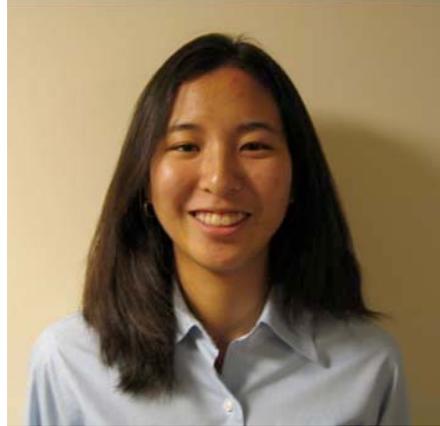


JEANETTE TSE

NIH-Oxford Scholar 2006

Degrees: Massachusetts Institute of Technology, B.S., Major in Biology and Minor in Biomedical Engineering and Literature, 2006

Research Interests: Genetics of Infectious Diseases



Jeanette Tse graduated with a Bachelor of Science from the Massachusetts Institute of Technology in 2006, majoring in Biology and minoring in Biomedical Engineering and Literature. Although medical research captured Jeanette's imagination in elementary school, it was not until her undergraduate career that she was able to truly cultivate this interest and build her research repertoire. While at MIT, Jeanette was a member of the Phi Beta Kappa Honor Society and won numerous awards, including, [the Bausch and Lomb Science Award, the Society of Women Engineers Award, (these two were in high school)] the 2005 MIT Burchard Scholar for the Humanities, Shaps Scholar for Academic Excellence, and the Toni Kim Memorial Scholarship. Jeanette also volunteered extensively with the Branch Christian Fellowship as the head of the executive council, a Bible study leader and a retreat co-coordinator. In addition, she also gave her time to volunteer at the Mt. Auburn Hospital and to teach citizenship classes to recent immigrants. Jeanette won a Summer Research Internship at the NIH studying sickle cell disease and exploring the use of nitric oxide and similar compounds in the lab of Dr. Mark Gladwin at the Clinical Center. During her last two years at MIT, Jeanette worked with Dr. Leonard Guarente investigating the molecular basis of aging with an interest in silent information regulators, a family of NAD-dependent protein deacetylases. Through experiments that Jeanette performed it was determined that SIRT1 regulates the expression of ABCA1, a key mediator of cholesterol reverse transport from peripheral tissues through interacting with transcription factors LXR α and LXR β . These results are part of a paper recently submitted for publication. As a result of these experiences, Jeanette would like to study genetic diseases and pursue medical research in an academic environment such as a teaching hospital. She believes that patience and persistence are two tools that are essential for a career in science.