High School Student Gains Accolades and Inspiration From Sidney Farber Research Project

Sidney Farber, MD, has been gone for nearly half a century, but the research breakthroughs of Dana-Farber’s founder 75 years ago are still making an impact and, in at least one case, helping inspire a young person’s future.

Ananya Jain of Bakersfield, California was just 14 when she learned about Farber three years ago while researching potential subjects for her high school’s annual National History Day (NHD) competition. Projects had to adhere to the theme “Breaking barriers in history”, and when Jain read about Farber’s revolutionary use of an anti-folic acid drug, aminopterin, to achieve the first-ever remissions in pediatric leukemia during 1947, and the decades he spent fighting cancer in the lab, clinic, and on Capitol Hill as a lobbyist for increased government funding, she knew she had found her research subject.

The result was Jain’s interactive website: Dr. Sidney Farber: Novel Use of Chemical Drugs for Breaking the Barrier of Childhood Leukemia. Filled with written content, images, data, and videos detailing Farber’s career, the site came together in part from first-person interviews Jain conducted with experts including Dana-Farber Chief of Staff Emeritus Stephen E. Sallan, MD, Harvey Cohen, MD, PhD, a former student of Farber and now Palliative Care medical director at Stanford Health, and Farber’s son, Thomas Farber. In addition to compiling essays on Sidney Farber’s landmark research, his key role in the “War on Cancer,” and his ongoing legacy, Jain devoted sections of the website to how cancer cells are formed and ways in which the public’s understanding of cancer has changed over time.

Just a freshman when she started the project, Jain earned first place in her county’s NHD competition in 2021. She was also a finalist - as well as recipient of the special “Medicine in History Award” - at California’s statewide NHD event that year. “Your research really helped develop a strong argument of the importance of this breakthrough and its impact on the world,” one judge wrote. Another stated, “you have distilled a large-scale reality of human existence into a developing narrative through the lens of one manifestation of the disease, and one historical actor - Dr. Farber.”

Even more thrilling for her was the response she received from Thomas Farber: “As my father would say: well done.”

Ananya Jain, a California high school student, chose Sidney Farber as the subject for her school’s annual National History Day project. Inspired by Farber’s work, she now plans to pursue a medical career.

“That felt great,” says Jain. “It was almost like Dr. Farber was talking to me.”

Further motivation
Jain, now a senior applying to college, says learning about Farber’s life has inspired her to ramp up her advocacy in and out of school.

“His compassion, and his zeal to always help others, has taught me to always be ready to help someone in need,” says Jain. “I have tried my best to apply this to my everyday life, whether by playing violin for residents at senior centers, reviving a high school club dedicated to serving hospice patients, or helping younger students in math and science.”

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Her future goals have also taken clearer shape. Jain was already considering a career in the medical field before her project, and that has not changed. What has changed is her determination to make an impact - just like her hero.

“This past summer I got to spend six weeks doing research in a molecular biology lab at UCLA, looking for genetic blood diseases,” explains Jain. “I was hooked up with a mentor who was guiding me through, and I got to see all the work he was doing. They told me when they were done, they were going to take their data and test it out on patients in clinical trials. I was like - WOW - all the stuff going on in the lab is actually going to make an impact on patients.

“That further motivated me to follow in Dr. Farber’s footsteps, and try to someday break a barrier in medicine if I can.”

A pledge which delights those who have been similarly inspired.

“While Farber's discovery of 75 years ago continues to play an essential role in the treatment of childhood leukemia today, it is critical that the next generation of physicians and scientists, like those Ananya aspires to become, continue the pursuit of discovery medicine,” says Sallan. “There remain many unanswered questions awaiting answers from tomorrow’s research.

“As Ananya knows, her success will be enhanced by at least two elements: good mentors and good luck.”

— by Saul Wisnia