

VISMAYA KHARKAR

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OBJECTIVE

Dedicated, hard-working, and accomplished student seeking admission to top colleges.

EDUCATION

GPA

- 4.0 (unweighted) for three years of high school
- 4.62 (weighted) for three years of high school

TEST SCORES

- 36 ACT composite
- 2400 SAT composite
- 1520 PSAT score
- 800 Biology – Molecular SAT Subject Test
- 800 Math Level II SAT Subject Test
- 800 Literature SAT Subject Test

GRADES & CLASSES

- Please see attached transcript

PUBLICATIONS

LSD2/KDM1B/AOF1 and Human Cancer Pathways: A Literature Review

Vismaya J. Kharkar, Dr. Allison Ast, Dr. Sumati Gupta, Dr. Sunil Sharma, 2016
Accepted for publication in *Cancer Studies and Therapeutics*, October 2016

AWARDS

NATIONAL MERIT SCHOLARSHIP SEMIFINALIST 2016-17

HOSA - FUTURE HEALTH PROFESSIONALS

- 1st place Medical Spelling and 4th place Prepared Speaking at 2016 State Leadership Conference
- 2nd place Medical Spelling at 2016 International Leadership Conference, Nashville, TN
- 2nd place Medical Spelling at 2015 State Leadership Conference
- 9th place Medical Spelling at 2015 National Leadership Conference, Anaheim, CA

SALT LAKE VALLEY SCIENCE AND ENGINEERING FAIR

- 2nd place Medicine and Health 10th grade
- 4th place Medicine and Health 11th grade

FUTURE BUSINESS LEADERS OF AMERICA

- 1st place Business Communications at 2014 National Leadership Conference, Nashville, TN
- 1st place Business Communications at 2014 State Leadership Conference
- 4th place Health Administration and 7th place Electronic Career Portfolio at 2015 State Leadership Conference
- Honored by the Utah State Board of Education

MODEL UNITED NATIONS

- Superior Delegation Awards at BYUMUN 2013, 2014, and 2015, UHSMUN 2014, 2015, and 2016, USUMUN 2016
- Position Paper Recognition at BYUMUN 2015
- Excellent Delegation Award at USUMUN 2014

PIANO

- Superior ratings from the Piano Federation in Solo, Duet, and Concerto performances (2005-2016)
- 3-year concerto cup, 6-year duet cup, and 12-year solo performance cup

SCRIPPS NATIONAL SPELLING BEE

- 5th place tie 2013, nationally
- 10th place tie 2012, nationally
- Honored by the Utah State Senate for Academic Excellence at the Scripps National Spelling Bee
- Guest speaker at the Utah State Senate

LEADERSHIP

HOSA STATE SERVICE VICE PRESIDENT UTAH

2016-2017 SCHOOL YEAR

Raising awareness and funds throughout Utah for HOSA service projects and for the HOSA organization. Organized the first ever HOSA Games, a state recognition event which encourages competitive service participation through both fundraising and awareness drives for the National Alliance for Mental Illness. Will continue to participate in coordinating and carrying out statewide HOSA activities throughout the 2016-2017 school year.

MUN CHAPTER PRESIDENT WEST HIGH SCHOOL

2016-2017 SCHOOL YEAR

Training new MUN future diplomats to success in conferences through the 2016-2017 school year. Managing paper submissions and conference registration.

HOSA CHAPTER SERVICE VICE PRESIDENT WEST HIGH SCHOOL

2015-2016 SCHOOL YEAR

Raised awareness throughout West High School for the Leukemia Lymphoma Society and for the HOSA organization. Ran club lunch meetings and mentored younger students.

SCIENCE FAIR ADVISORY BOARD SECRETARY SALT LAKE CITY

2015-2017 SCHOOL YEARS

Raised funds for the Salt Lake Valley Science and Engineering Fair through grant writing, soliciting sponsors, and organizing a benefit carnival with fellow board members, which contained several hands-on booths to teach science lessons to elementary students. Ran a medically-oriented booth with blood pressure, heart sounds, neuroscience, reflex, and body fat labs for elementary students. Helped coordinate actions of student science fair clubs in schools across the Salt Lake valley. Serving as secretary through the 2016-2017 school year.

SCIENCE FAIR CLUB WEST HIGH SCHOOL

2015-2016 SCHOOL YEAR

Mentored 7th-9th graders in conducting research to submit as science fair projects. Offered tutoring and guidance to those in need and guided several students through the processes of registration and science fair eligibility.

ZEPHYR EDITOR-IN-CHIEF WEST HIGH SCHOOL

2015-2017 SCHOOL YEARS

Designed, wrote, researched, and published the West High historical zine, *Zephyr*, which contains poetry and art from *West Winds* and *Red and Black* archives, which date back to 1915. Interviewed Poet Laureate of Utah for information on the role of poetry through history. Organized publicity campaigns at local libraries to promote *Zephyr*.

FRESHMAN MENTOR SOCIETY WEST HIGH SCHOOL

2015-2016 SCHOOL YEAR

Mentored two new freshmen at West through their first steps with the school and high school as a whole. Monitored and aided mentees with grades, offering tutoring, and with peer relationships.

WESTWINDS PUBLICITY MANAGER WEST HIGH SCHOOL

2015-2016 SCHOOL YEAR

Organized publicity campaigns for *West Winds*, including flyer campaigns, presentations throughout English classrooms, and announcements. Kept in contact with magazine staff. Organized presentations from local zine editors to offer career advice to the magazine staff and editors.

BOLLYWOOD DANCE CLUB PRESIDENT WEST HIGH SCHOOL

2015-2017 SCHOOL YEARS

Organized cultural get-togethers of those interested in Bollywood music and dance, as well as Indian food and culture. Choreographed and taught peers several dance routines for performance in West High School Multicultural Assembly.

FBLA CHAPTER VICE PRESIDENT WEST HIGH SCHOOL

2014-2015 SCHOOL YEAR

Submitted monthly chapter reports to region leadership and kept club up-to-date with state programs and goals. Ran meetings in the absence of the FBLA chapter president. Mentored younger students and organized competition schedules and practices.

WESTWINDS TREASURER WEST HIGH SCHOOL

2014-2015 SCHOOL YEAR

Organized fundraisers for *West Winds*, school literary and art magazine. Managed funds and oversaw sales of magazine.

SERVICE

UNIVERSITY OF UTAH JUNIOR VOLUNTEERS UNIVERSITY OF UTAH HOSPITALS

SUMMER 2016

Volunteered in admitting and radiology departments of the University Hospital and Huntsman Cancer Institute. Gained experience with patient care and health care logistics.

YOUTHLINC REAL LIFE MENTORS WEST HIGH SCHOOL

SPRING 2016

Regularly volunteered in tutoring new or ESL students at West High, as well as aiding with and participating in activities through the Real Life Peer Mentor Group.

THE LEUKEMIA AND LYMPHOMA SOCIETY WEST HIGH SCHOOL

2015-2016 SCHOOL YEAR

Raised awareness throughout West High School for the Leukemia Lymphoma Society by conducting a bracelet campaign called "I wear lime green" and holding a successful and profitable holiday sale of ornament-grams for the student body. Worked with LLS members to establish a plan of action for service opportunities throughout the school year. Planned a fundraiser to be executed in March, near the time of the Utah State HOSA conference, to further raise funds and awareness for blood cancer research statewide.

NATIONAL HONORS SOCIETY MEMBER WEST HIGH SCHOOL

2015-2016 SCHOOL YEAR

Volunteered at various local institutions such as the Humane Society of Utah, the Ensign Library, and at West High School itself. Helped care for rescued animals, aided teachers in organization and library upkeep, and created and decorated boxes of supplies for refugees, among other service opportunities.

WAI HIGH SCHOOL, NEAR PUNE, INDIA

SUMMER 2015

Taught English and literature comprehension lessons to 8th grade students at Wai High School. Discussed concepts such as plot, setting, characterization, and theme, and how they can be used to analyze works of literature. Taught vocabulary and reading comprehension through context. Also taught a poetry creation workshop to the students.

WAI HIGH SCHOOL, NEAR PUNE, INDIA

SUMMER 2014

Travelled with students from Westminster College, serving as translator and teacher of science lessons to underprivileged 7th and 8th grade students in the village of Wai, at Wai High School. Additionally, taught lessons to those with mental disabilities at the Akshar Institute. Took part in a campaign for empowerment of young girls at the local library, teaching and translating for science lessons.

UTAH FOOD BANK, SALT LAKE CITY UTAH

SUMMER 2013 AND 2014

Volunteered at the food bank; sorted and packed food donations for distribution.

ENTREPRENEURSHIP

- Runs Vismaya School of Dance since 2015 after graduating to a professional level of Bharatanatyam classical dance, with 24 total students; teaches Bollywood dance to adults and elementary-age students as part of the Community Education program at West High School (2015, 2016)
- Kickstarter campaign to fund the print version of Zephyr, a historical literary and art zine at West High School

MEDICAL WORK EXPERIENCE

INTERNSHIP, JORGENSEN LAB, UNIVERSITY OF UTAH - DEPARTMENT OF BIOLOGY

FALL 2016-SPRING 2017

Studying circadian rhythms through the nematode model *C. elegans*. Investigating the Cab-1 pathway, which along with neuropeptides, may indicate either a touch-based or sympathetic neuronal pathway to digestion and body clock regulation.

INTERNSHIP, CIT LAB, HUNTSMAN CANCER INSTITUTE

WINTER 2015-SPRING 2016

Investigated the role of demethylase LSD-2 in breast cancer. Gained experience in cDNA and RNA PCR, as well as lentivirus CRISPR-Cas9 vector and siRNA vector transfection techniques. Compound assays were also performed. Demonstrated the potential of SP-10041 to be used as a potential therapeutic target for LSD-2 as well as LSD-1. Observed the phenotype of breast cancer cells after LSD-2 knockdown, indicating that LSD-2 is a tumor-suppressor gene rather than an oncogene, as previous literature maintains. Used RNA and protein assays, as well as Western Blot techniques, to investigate the efficacy and effect of various forms of knockdown on LSD-2.

INTERNSHIP, CIT LAB, HUNTSMAN CANCER INSTITUTE

WINTER 2014-SPRING 2015

Performed CETSA's (cellular thermal shift assays) as part of a project investigating the effects of various experimental therapeutic compounds on demethylases LSD-1 and LSD-2 in leukemia, breast cancers, and non-small cell lung cancer. Gained experience in Western Blot techniques, gel electrophoresis, gel transfer, mechanical lysis, and compound treatment. Demonstrated the potential of SP-10041 to be a more stable binding agent for LSD-1 than commercially available compounds and as a target for further research.

SUMMER INTERNSHIP, CIT LAB, HUNTSMAN CANCER INSTITUTE

SUMMER 2014

Worked with lab fellows and technicians to gain knowledge in practical laboratory techniques. Gained experience with sterile culture, hood use, pipetting, cell plating, and maintenance. Performed enzymatic assays, bacteria culture, and Western blot procedures as part of a collaboration with other lab members.

ARTISTIC EXPERIENCE

DANCE

- Professional Bharatanatyam classical dancer, after 7 years of instruction and performance, followed by performance of an Arangetram, a three-hour solo graduation performance.
- Experienced Bollywood dancer, veteran of many performances throughout Utah, solo and group.
- Dance teacher to adults and elementary and middle school students, through West High Community Education and Challenger School.
- Performed and taught at the 2015 American Indian Medical Society of Utah fundraiser.

PIANO

- Has played piano for over 12 years, earning consistent Superior ratings from the Piano Federation and a 12-year cup

WRITING

- Writes poetry and has published work in the *West Winds* and Utah Poetry Society Magazines
- In-progress novel over 70,000 words

SKILLS

EFFECTIVE COORDINATION AND COMMUNICATION

- Personable with well-developed social skills
- Excellent team player who enjoys working with others
- Has experience with teaching and working with children

COMPUTER PROFICIENCY

- Proficient in Microsoft Office 2013, including Microsoft Word, Excel, Publisher, PowerPoint, and OneNote.
- Coded several programs in Java and Lua; obtained state certification in Computer Programming I.

ENGLISH LANGUAGE, COMPOSITION, AND COMPREHENSION SKILLS

- Proficient in English
- An excellent writer of informative essays as well as both prosaic and poetic fiction