

MILTON FISHER SCHOLARSHIP

for INNOVATION and CREATIVITY

www.rbffoundation.org
click on "download application"
applications due APRIL 30, 2013

a four-year Scholarship of up to \$20,000
(granting awards of up to \$5000 per year to each winner)
for exceptionally Innovative and Creative High School
Juniors, Seniors and College Freshmen who
--are from Connecticut or the New York City metro area (and
plan to attend or are attending college anywhere in the U.S.)
OR --are from any part of the U.S. who plan to
attend (or are attending) college in CT or NYC

apply for this scholarship
if you are . . .

... a student who has come up with
a distinctive solution to a problem
faced by your family, school,
community or the world

... a student who has solved an
artistic, scientific, or technical
problem in a new or unusual way

... a student who has developed an
innovative way to save the environment
or improve people's health

HOW TO APPLY Download applications at
www.rbffoundation.org

**Applications must be postmarked by
April 30, 2013**

Consult the application form for further details.

Questions? Call the Community Foundation
for Greater New Haven, which is handling the
administration of the scholarship, at 203-777-2386
or email mfscholarship@gmail.com

AWARDS AND SELECTION OF RECIPIENTS We will
select the applicants who show the most promise
as innovative, creative problem solvers on the
basis of the projects described in their essays and
letters of recommendation, and other information
included with the application. *Connecticut and
New York City Metropolitan Area high school
juniors and seniors, as well as applicants to,
and freshmen at, Connecticut and New York City
colleges, are eligible to apply for the scholarship.*
*For further details see the website listed
above.* We anticipate granting awards of up to
\$5000 per year to each applicant who demonstrates
exceptional innovation and creativity. Financial
need does not affect the judges' decision about
winning projects, but it does determine the amount
each winner of the four-year scholarship receives.

2012 WINNERS

ELIZABETH DENTE, ENGLEWOOD CLIFFS, NJ (BERGEN COUNTY ACADEMIES). Recognizing the high cost of many wound repair treatments, Elizabeth Dente sought a cost-effective way of making skin wounds heal more quickly. When her school accidentally ordered a different substance than the one she had requested, Elizabeth decided to experiment with the potential wound-healing properties of the one that arrived. She combined benzoin with a natural anti-oxidant, olive fruit extract, and developed an effective delivery system. Neither this combination of substances nor this delivery system had been used for skin repair previously. Her experiment was a success. She plans to study biomedical engineering at Columbia University.

RYOTA ISHIUKA, COS COB, CT (GREENWICH HIGH). Given that there is never any shortage of human waste, but there is always a shortage of energy, Ryota decided to experiment on how to use waste water itself as a potential energy source. The prototype he created of an independent microbial fuel cell to drive a bio-electrochemically assisted wastewater treatment reactor was the first of its kind to be able to generate significant levels of hydrogen using waste as the only input source. It has the potential to be widely replicated in developing nations where stable electricity grids are not readily available. He plans to study applied mathematics at Harvard.

MOSHIN JAWED, WILTON, CT (WILTON HIGH). Moshin Jawed had a passion for math that his classmates didn't share. Where his classmates saw only endless memorization, Moshin saw intriguing patterns and connections. Moshin wrote TRIGgering the Genius in You, a new guide that re-conceptualizes trigonometry to stress pattern recognition rather than strict memorization, teaching students to recognize and build on fundamental patterns to achieve higher levels of comprehension. He plans to study pattern-recognition at the crossroads of mathematics and medicine in the Rensselaer Polytechnic Institute/Albany Medical College's Seven-Year Accelerated Physician-Scientist program.

ANGAD SINGH, MILTON, GA (MILTON HIGH). In an atmosphere of increasingly violent attacks on young Sikhs like himself in the U.S., Angad recognized the importance of documenting the stories of young people who were Sikh and American. He made a documentary—*Roots and Wings*—to help Sikh youths across the U.S. gain acceptance in their communities and recognize that one did not have to “give up one's cultural roots in order to achieve one's dreams and fly on one's wings.” The moving documentary has been screened in hundreds of schools around the country. Angad hopes that studying political science and film at Columbia University will help him continue to use media as a tool to change the world.

ALEC URBACH, ROSLYN HEIGHTS, NY (ROSLYN HIGH). Alex knew that millions of children in the developing world fail to get the kind of science, math and health education that they desperately need to address their society's problems because they are illiterate, and fail to attend school regularly because of health problems. Alex developed an animated cartoon curriculum for teaching science, math and healthcare to elementary school children; he also created an organization, *Giving from the*

Ground Up, to distribute both the curriculum and healthcare supplies and to fund the building of wells for clean water near schools. His cartoon-animated curriculum is being used in two villages in Ghana. *Giving from the Ground Up* has also built wells and delivered toothbrushes, toothpaste, and other supplies. Currently a high school junior, Alex hopes to expand this ambitious initiative to other parts of the developing world. He plans to study film and history in college.

ZIZI YU, WOODBRIDGE, CT (AMITY REGIONAL HIGH). The guidelines of the American Academy of Pediatrics over the last decade emphasize avoiding food allergens in early childhood to avoid irritating young children's sensitive digestive tracts. But Zizi suspected these guidelines were wrong and that the opposite was true: that “lack of exposure allergens and pathogens in the first few years of life could result in under-activation of the immune system and a subsequent lack of tolerance even for ordinary, innocuous substances.” Zizi tested her theory by surveying the diet and allergy history reported by parents of 258 children between the ages of 14 and 18. She hopes her research will help prompt pediatricians to re-evaluate their guidelines. She plans to study biology or environmental engineering at Yale University.

HONORABLE MENTIONS

RANA ABDELHAMID, FLUSHING, NY (MIDDLEBURY COLLEGE). Troubled by women's vulnerability to domestic violence around the world, Rana, a black belt in karate, founded *Unbreakable Strength*, a women's empowerment program that has used dialogue and instruction in self-defense to help at-risk young women in New York and Mexico. Rana is freshman majoring in political science at Middlebury College.

MARTINA CARRILLO, BRONX, NY (LA GUARDIA COMMUNITY COLLEGE). Knowing first-hand the isolation that made being an undocumented immigrant youth so difficult, Martina helped create a space “where undocumented immigrants can come together, speak about their situation without fear, and feel part of the community.” She also developed a website that provides them with current information about immigration issues. Martina is studying social science and humanities at LaGuardia Community College.

HILLARY DADIO-PERONE, HAMDEN, CT (HAMDEN HIGH). Passionate about making the next generation aware of the importance of sustainable food, Hillary developed an innovative class for seven- to nine-year-olds at the Eli Whitney Museum in Hamden, CT that included planting a “pizza garden” and learning how to dry and preserve food. Hillary will study agricultural economics at the University of Wisconsin-Madison.

MARY E. KAUFMAN, SOUTHURDY, CT (POMPERAUG HIGH). Mary's six-month-old sister suffered from severe eczema that was aggravated by the tiny cast she had to wear on her arm, that she used as “a personal face scratcher.” To prevent her sister from scratching herself raw with her cast and tiny fingernails, Mary sewed long sleeves stitched together at the bottom, made of soft fabric, to all the baby's shirts, allowing her to move freely without

being able to scratch herself. Within a week her condition improved greatly. Mary will study marine biology and psychology at the University of Miami.

SHANAWAJ KHAIR, FLUSHING, NY (JOHN BOWNE HIGH). Long intrigued by research on the roots of obesity, Shanawaj designed an experimental research proposal, persuaded a professor in a local college to mentor him, and got biotech companies to donate materials he needed for his experiments. The result was an innovative study of the correlation between body mass index and the frequency of certain gut bacteria in mice. Shanawaj will study biology at Stony Brook University.

MOUSSAFFA KHAN, ASTORIA, NY (HEALTH PROFESSIONS HIGH). Aware of the high rate of violence against women in Bangladesh and Pakistan, Moussaffa sought and received funding from the United Nations Entity for Gender Equity and the Empowerment of Women to help her and her team create compounds in Bangladesh and Pakistan that would be safe spaces for victims of domestic abuse. She will be studying pharmacy or biochemistry at Long Island University.

AYISHA MCHUGH, BROOKLYN, NY (POLY PREP). When struck by the lack of any forum in which students at Poly Prep could discuss issues of diversity in constructive ways, Ayisha founded *L.E.A.D.* (“Listen. Educate. Appreciate Diversity”). It has markedly increased communication on sensitive issues at her school. Ayisha plans to attend Colgate University.

MELISSA SETO, BROOKLYN, NY (STUYVESANT HIGH). Melissa was troubled by the urban air pollution she encountered in New York and during a trip to China. She hopes that the innovative research she conducted on whether green roofs could reduce microscopic particles in the air that contribute to respiratory or cardiovascular disorders will encourage the city to support the construction of many more green roofs. Melissa plans to study environmental science at Columbia.

JACOB WOLF-SOROKIN, BROOKLINE, MA (BROOKLINE HIGH). Although *state budget cuts* affected all youth across the state, young people in the suburbs and the city had never seen their fates as linked until Jacob and some fellow teenagers founded an organization to unite urban and suburban youth in fighting against these cuts together. The organization, *YMORE*—Youth of Massachusetts Organizing for a Reformed Economy—successfully lobbied the legislature to restore some of the cuts. Jacob plans to major in environmental studies or political science at Yale.

GRACE YOUNG, NEW YORK, NY (TRINITY SCHOOL). Despite the fact that one-sixth of the world's population lives in rural China, Grace found that there was no organization devoted to helping children there get an education. The organization Grace founded—*Under the Same Sky*—has raised funds to send 30 children in Yunnan and Shanxi to school. Currently a high school junior, Grace plans to major in Molecular and Cell Biology and minor in literature before entering an MD/PhD program.