

ORIENTATION SESSION OF HARLEM CHILDREN SOCIETY'S SCIENCE & ENGINEERING MENTORING PROGRAM 2006 THINKING GLOBALLY ACTING LOCALLY

Over 183 Under-resourced and Under-served students have been inducted as fresh interns for the highly intensive research program on June 29th at Memorial Sloan Kettering Cancer Center in New York. **The orientation lays the commencement of summer & all-year round internship program and the weekly lecture series during which students present their research and are addressed by leading scientific experts as well as prominent members of society.**

The audience mainly was comprised of over 180 participating students from over 50 High Schools from under-resourced and under-represented neighborhoods. Local, and national community leaders attended the event and addressed the current batch of students – including - ***Nobel Laureate, Prof. Sidney Altman (Chemistry, 1989) – (he had to postpone his presence with us till a future date owing to sudden illness - however send his wishes to our students); Consul General of New Zealand, Hon. Gina Lento; NPR Science Friday, Executive Director, Ann Marie Cunningham; Dr. Murray Brennan FACS, Chairman Dept. of Surgery, Memorial Sloan-Kettering Cancer Center, and Dr. Julia Rankin, Science Director of New York City Board of Education.***

Over the next several weeks, the students will be guided and mentored by over **250 scientists, doctors and engineers in over 50 reputed Institutions all over the Tri-state area and nationally.** This year we also are sending some of these young minds from such compromised situations and backgrounds, to perform research with some of the top scientists at NASA; and will see our involvements expand nationally to such communities in the Hopi & Navajo reservations in Arizona, New Orleans, Detroit, Michigan, Tennessee, and Kansas. Internationally, we are expanding the program to the Mohawk Reservation near Montreal in Canada, Ghana, South Africa, Brazil, and Columbia. All of the high school students participating in the program receive a substantial stipend/ Scholarship for their summer research. We have also expanded our Program to include some of our past students who have graduated high school; and are still pursuing research - in order to retain them in the sciences. The 'After-School' Research Internship will continue through this year.

The entire event was broadcasted live to Camden in New Jersey, where students and mentors participated in live events at the orientation.

The *Experiment with a Dream* project selects young people living and attending schools in under-resourced urban communities and engages them in hands-on scientific work-study at major research institutions teaming them with some of the best researchers in their fields at major research institutions around New York City including Memorial Sloan-Kettering Cancer Center; The Rockefeller Univ.; Columbia Univ.; Columbia Univ., College of Physicians & Surgeons; New York Univ.; CUNY; Steven's Institute of Technology, NASA; and others. Scientists volunteer their time and expertise to mentor the students throughout the summer internship and all year round After School internship program, which includes laboratory work, seminars & written reports.

This year sees the participation of 183 plus High school students over 50 schools (Grades 7 - 12) from inner-city neighborhoods (mostly in NYC) and from the states of New Jersey, Tennessee, Kansas and the Native American Hopi and Navajo Reservations in Arizona. They would be conducting research under the mentorship of over 250 renowned scientists and researchers in over 50 institutions such as -

Memorial Sloan Kettering Cancer Center, Cornell University Medical Center, Columbia University, Rockefeller University, Albert Einstein School of Medicine, Beth Israel Hospital, Stevens Institute of Technology, Hunter College of CUNY, New York University, American Museum of Natural History, Fordham University, Bronx River Alliance, The Gaia Institute, and the Lehman College Natural Sciences. They will also participate in the 'After-school all-year-round Research Program where they will continue their research. The students were selected based on their motivation, enthusiasm & performance at school, on the recommendations from their principal and science teachers, and the interview during the selection process – which earned them a spot in the summer internship.

SENDING STUDENTS FROM INNER CITY NEIGHBORHOODS TO DO RESEARCH AT NASA SPACE RESEARCH INSTITUTE AT KENNEDY SPACE CENTER

In collaboration with the Harlem Children Society and University of Central Florida Chapter of Sigma Xi Society, we send SIX students from inner city neighborhoods in Harlem, Bronx and Camden to do research in Robotics and Propulsion & Plasma Research with some of the advanced and breakthrough technologies. Four of the students are still in high school. The other two have been in our program (as high school students) for over 3 subsequent years and are presently undergraduate students in Rensselaer Polytechnic Institute and Steven's Institute of Technology respectively. **Four of the students are young women and all are from extremely impoverished and attenuated life situations – including one who has been in a homeless shelter till a few years ago.** The Harlem Children Society is supporting not only the student's stipend, but also, their travel, stay and pay for a senior scientist to train our future potential and young enthusiasts.

The students are given a thorough background in the sciences related to the projects, including Frequent Lectures & Tutorials by several scientists and researchers. All of the students are given rigorous training relating to the Techniques, Safe and Proper handling of devices, instruments, chemicals & biologicals relating to the ongoing projects. They are given individual projects to complete by the end of the summer term. Proper guidance and background will be given to enable them to build self-confidence and presentation skills. At the end of the summer term, the students are required to summarize their work and present their results in the laboratory and encouraged to compete with other students at several Regional and National Science conferences & Competitions.

All of our past students successfully participated & competed in several Regional & National Science conferences & Competitions in the tri-state area, including Chicago, San Diego, Colorado, etc, presenting their work with full self confidence and winning innumerable Regional and National Awards including the 'New York Times Scholarship' and \$150,00 'Posse scholarships'. They developed a sense of responsibility & commitment towards completion of their work and projects. All of our students who have gone through the program have since joined institutes of higher learning and many are enrolled in leading universities like Cornell, Penn State, Rutgers, Swarthmore, Dartmouth, Columbia, NYU, Rensselaer Polytechnic Institute, in MD, MD/PhD, engineering, Veterinary programs and others. All students have expressed an intense interest in the pursuit of a Career in the Sciences & Engineering.

The Harlem Children Society is dedicated to promote innovative science education programs to children and youth living in under-resourced and underserved communities and school districts. We seek to engage learners in a healthy enquiry of the world, and to expose them to opportunities available in the field of science that might be otherwise out-of-reach. Therefore providing students with the knowledge, skills, guidance, encouragement and an understanding emphasizing the pursuit of higher education and career achievement.

The Program now is regarded as one of the largest and best of its kind in the country.