NEW YORK CITY ALLIANCE NEWS

VOLUME 9 ISSUE 4 SEPTEMBER 2002

NSF AWARDS THE NEW YORK CITY LOUIS STOKES ALLIANCE $2.7M FOR PHASE III 2002-2007

The National Science Foundation has awarded The New York City Louis Stokes Alliance of the City University of New York a $2.7M award to continue its mission of increasing the number of underrepresented minorities receiving baccalaureate degrees in science, mathematics, engineering and technology (STEM) disciplines. The award to run from 2002 through 2007, is a cooperative agreement between the NSF and the City University of New York.

ABOUT THIS ISSUE:

LSAMP activities of Phase I and II were centered on curriculum reform and enhancing the pathways for minority STEM enrollment and graduation in CUNY. LSAMP Phase III will intensify these activities to provide the conditions needed to more than double the graduation rate to 1,500 per year in the STEM disciplines by 2007. Similarly, graduation at the two-year colleges will be a significant contributor to the STEM pipeline, and must reach levels of 500 per year by 2007. LSAMP Phase III activities will build on the successes of CUNY over the previous ten years of Phase I and II to ensure: 1) a substantial impact on the rate of attendance in STEM graduate programs by program participants; 2) increased rate of graduation of underrepresented minorities at the baccalaureate and associate levels at Alliance member institutions; 3) increased entrance into the teaching profession at the K-12 level and academia by underrepresented minorities; and 4) continuation of work in progress towards the formation of the CUNY Consortium for Minority Participation in STEM (CCMP-STEM), which will constitute the administrative and complete institutionalization of LSAMP activities by the University.

LSAMP Phase III and CCMP-STEM will finalize the building of permanent infrastructure and an integrated pipeline with University Institutes and Centers, Distinguished faculty, STEM related programs, Agency and Industry partners, minority and teacher preparation/education focused initiatives and programs. These activities and partnerships will serve to effectuate CUNY's commitment to participation in the STEM enterprise at all levels.

NYC LSAMP FUNDING

NSF support for the LSAMP 1992-2002 ($10 M over ten years) was matched by University contributions totaling over $15.5M from 1993-2001. LSAMP support from foundations and other agencies totaled close to $5M during that period. Additional resources have been contributed in direct summer research support to students in the form of stipends, travel and accommodation at National Laboratories, research universities and agencies throughout the country.

PROJECT APPROACH

LSAMP Phase III is designed to provide a comprehensive multi-year experience for LSAMP participants. A

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New York City Alliance News

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The New York City Louis Stokes Alliance for Minority Participation is funded under a cooperative agreement with the National Science Foundation.

NYC LSAMP Phase 3

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number of models developed during Phases I and II will serve as the blueprints for management and operation of the Alliance. The models are essential units of the Alliance, and guide the interactions and duties of the participants, core activities, and promote a systemic comprehensive approach that supports the LSAMP mission and goals. These models include a Campus model that delineates the campus based operation and programmatic interactions for the participating college, an Activity Coordinator model that delineates the duties and activities of the campus coordinator, a Learning Center model that delineates the activities which occur at the learning center, and a Research Assistantship model that promotes continuity of individual student participation in research from one transition point to another with a support base that varies increasingly according to the academic level of the participant.

Management Plan

The organization and management structure of the NYC LSAMP will continue to include: A Governing Board, chaired by Chancellor Matthew Goldstein; a University-wide Steering Committee, chaired by the Principal Investigator/Project Director, Dr. Neville A. Parker; College-wide Campus Steering Committees, chaired by the respective Steering Committee Members; and a University-wide Activity Coordinators Committee, chaired by the Project Administrator.

The management and leadership structures have been constructed to ensure that LSAMP represents a cooperative effort of the participating institutions and functions systematically. As mentioned above, the LSAMP models and best practices of Phases I and II will continue to be utilized in LSAMP Phase III and will serve as the template for the CCMP-STEM consortium.

CUNY Consortium

Discussions on establishing CCMP-STEM within CUNY began two years ago, was presented at the Fourth Annual Urban University Conference Series in 2001, and discussed extensively at the Steering Committee and Governing Board levels of the Alliance during that period. Achieving chartered status for CCMP- STEM during the upcoming year, and increasing external support to $2M per year will be a centerpiece of Phase III. CCMP-STEM will:

• Establish a Governing Board and an Advisory/Support Board to provide policy direction, governance and strategic guidance.

• Provide leadership, consultation, strategic planning, implementation, and support to the university and its partners. The all-campus initiative will analyze and recommend grants, and work collaboratively with faculty, administrators and staff to enhance and promote student, faculty and staff advancement.

• Work cooperatively with local, state and national agencies, laboratories and industries to place CCMP Scholars and CUNY students in experiences for professional development.

• Work with University executives, project directors, administrators, and faculty to further develop and implement a comprehensive program to increase philanthropic endowment and grant funding, private contracts, recruitment of high caliber students and faculty, and awareness of the CCMP.

Alliance Partners

Alliance partners are key to providing a core of undergraduate, graduate and postdoctoral participants with 1) research and training, 2) mentoring,

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QUEENS COLLEGE LSAMP SCHOLAR WINS CHASMAN SCHOLARSHIP

Tamara Blain, a Queens College student who had once suffered from a deep depression that led to her being homeless, has won the 2002 Renate W. Chasman Scholarship for Women. Brookhaven Women in Science (BWIS), a not-for-profit organization at the U.S. Department of Energy's Brookhaven National Laboratory, awards the scholarship annually to encourage women to pursue careers in science, engineering or mathematics.

One winter I began staying overnight at Kinko's, as it was open 24 hours and was a respite from the cold. There I made friends who allowed me to use the computers free of charge at nights. As a result, I taught myself several graphic design programs and began to work freelance as a graphic designer. Thus began my love affair with computers."

Named after the late Renate Chasman, a renowned physicist who worked at Brookhaven, the $2,000 scholarship is awarded each year to a re-entry woman - one whose college education was interrupted, but who has returned to pursue a degree on a half-time or greater basis. After earning a B.S. in biochemistry at Stony Brook University in 1995, Blain suffered a series of traumatic experiences that left her severely depressed. Blain explained, "My self-esteem was extremely low as I took odd jobs and stayed with friends, often finding myself homeless. One winter I began staying overnight at Kinko's, as it was open 24 hours and was a respite from the cold. There I made friends who allowed me to use the computers free of charge at nights. As a result, I taught myself several graphic design programs and began to work freelance as a graphic designer. Thus began my love affair with computers."

Between 1996 and 2001, Blain pursued several career paths. She was a freelance Web developer at Investars.com and a freelance graphic designer. Also, she had worked as a computer services consultant at Kinko's, an intern at Sensenet, Inc., and a Web developer at Concrete Media, Inc. In 1997, Blain enrolled at Lehman College as a computer science major, and,

NYC LSAMP SCHOLAR TAMARA BLAIN PRESENTING HER RESEARCH AT THE LSAMP SUMMER 2002 POSTER SESSION

in 1998, she transferred to City College. Today, she is continuing her studies at Queens College, where she is also a research assistant, and she expects to graduate with a B.S. in computer science in December. She plans to go on to earn a Ph.D. and teach computer science at the university level. She also would like to shape undergraduate curricula and write texts on specialized computer science topics. In addition, she wants to apply her computer knowledge and amateur inventor ability to the field of robotics in medical science, or to collaborate on biotechnology or nanotechnology projects.

For more information on Brookhaven National Laboratory and the Chasman Scholarship contact Diane Greenberg at greenb@bnl.gov.

CONFERENCES 2002

SEPTEMBER 26TH - SOCIETY FOR THE ADVANCEMENT OF CHICANOS AND NATIVE AMERICANS IN SCIENCE (SACNAS) - ANAHEIM, CA

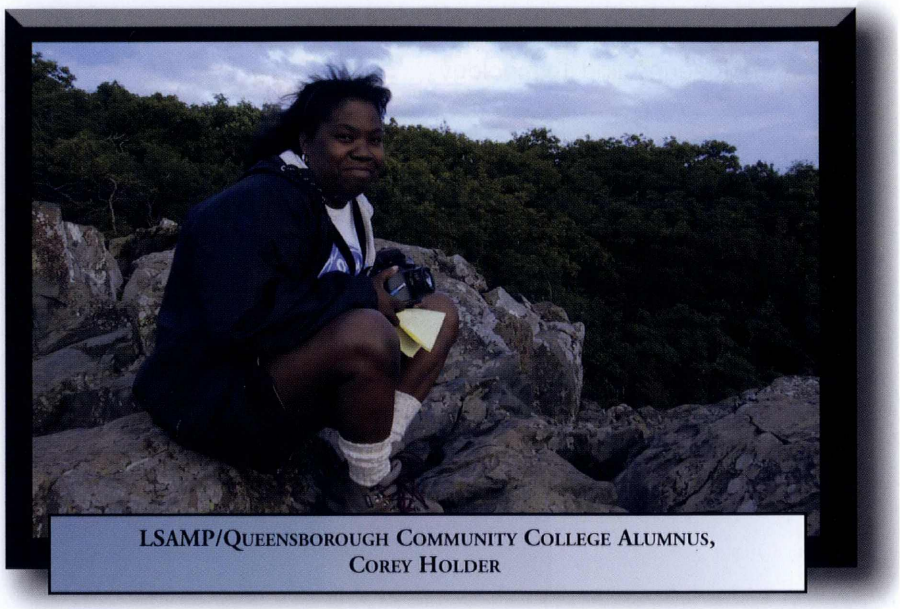
OCTOBER 17TH - 3RD ANNUAL BERKELEY EDGE CONF. - BERKELEY, CA

NOVEMBER 1ST - DOE EPSCOR HRD/LS-LAMP - BATON ROUGE, LA

NEW YORK CITY LSAMP ALUMNI CORNER *By Helena Leslie*

Corey Holder

For Queensborough graduate Corey Holder, LSAMP was the doorway to a vast array of professional skills and a stimulating connection with NASA GISS. As an LSAMP research scholar, Ms. Holder developed an atlas of extra-tropical storm tracks on the web. She acquired a command of Fortran, and worked on a web-based curriculum focused on the GISS sun photometer project. Along the way, she gained basic skills in UNIX, Macs, and regular PCs.



LSAMP/QUEENSBOROUGH COMMUNITY COLLEGE ALUMNUS, COREY HOLDER

Today, Corey Holder is a broadcast systems engineer at ABC Television, where she is using skills she developed at GISS. She began freelancing as a video engineer and satellite coordinator while still in the LSAMP program. Today, she designs, supervises, and installs control rooms and edit rooms, doing all the AutoCAD drawings and schematics. "I

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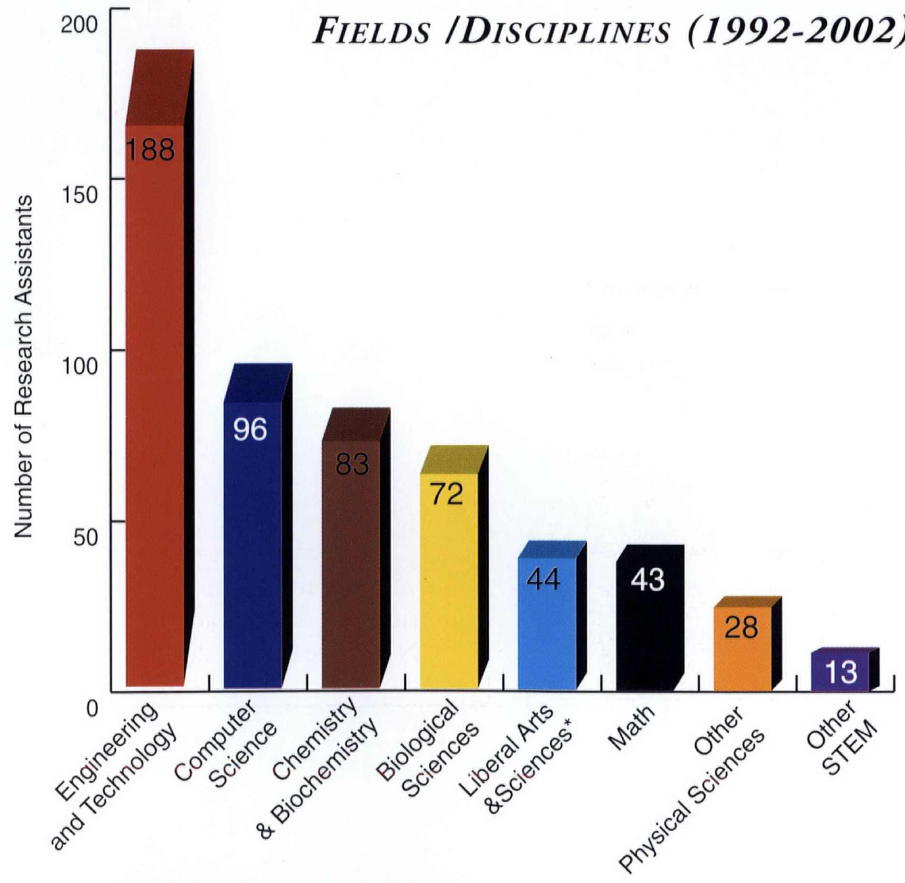
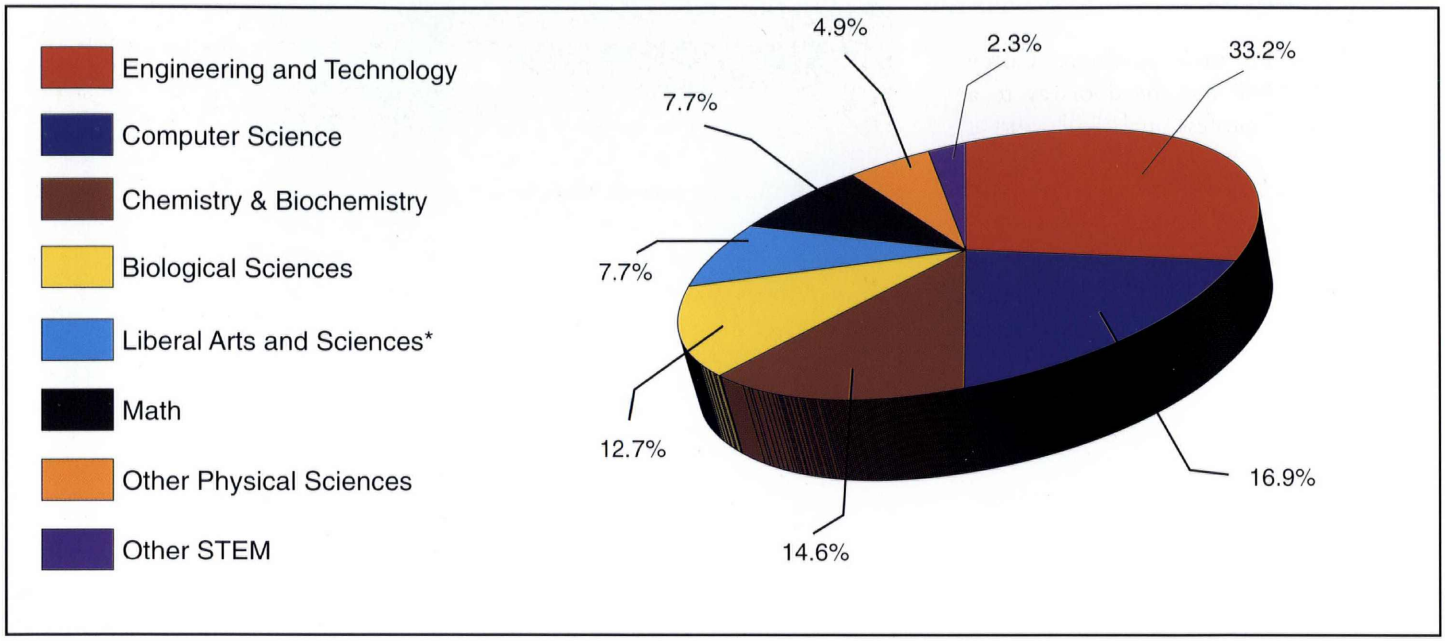
The New York City Louis Stokes Alliance for Minority Participation continues to be a vehicle that engages students in research, enriching their academic programs with value added opportunities in the STEM disciplines.

FIELDS /DISCIPLINES (1992-2002)

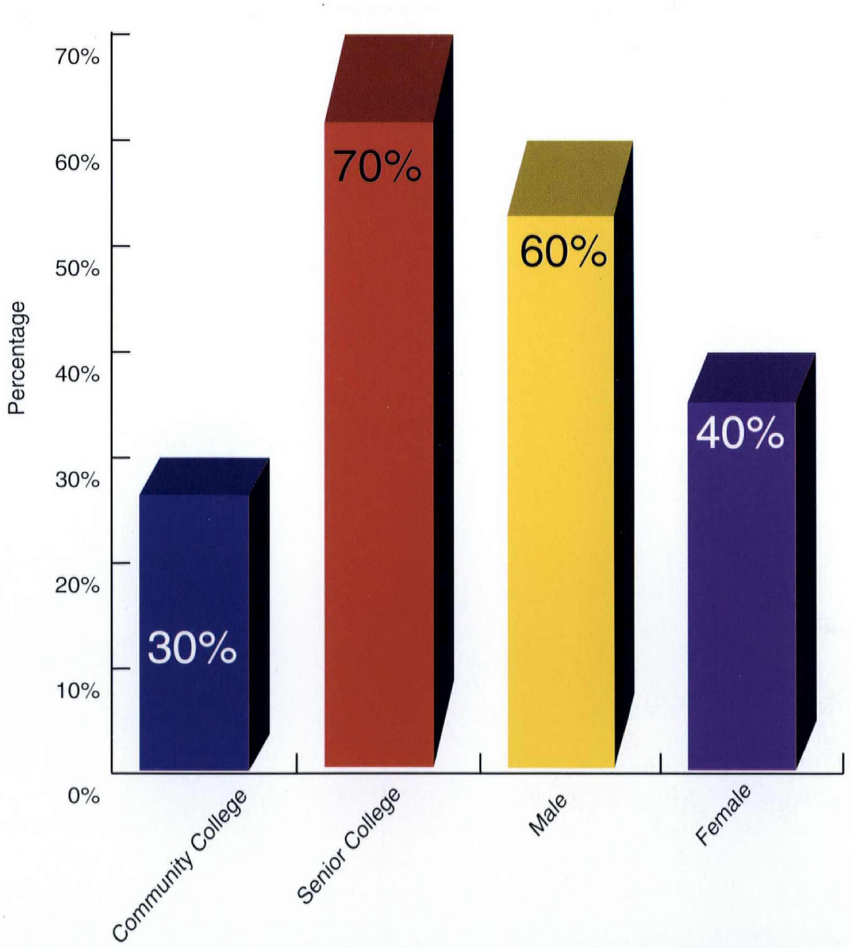


Over 500 students have been recipients of LSAMP undergraduate Research Fellowships, and over 230 have graduated with Baccalaureate degrees in the STEM disciplines from the City University of New York.

Engineering and Technology majors combined with Math and Computer Sciences accounted for over 50% of the participants. Majors in the Chemical and Biological sciences accounted for over 25% of the participants.



* Primarily students at the Community Colleges



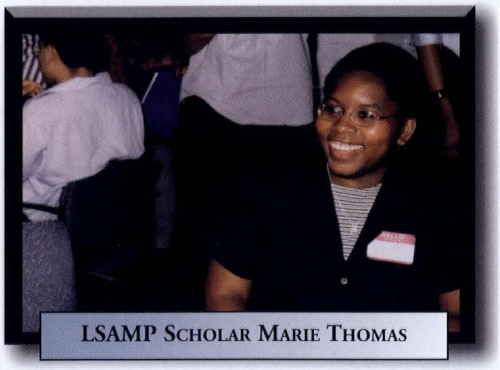
The NYC LSAMP alumni population is 60% male and 40% female, the six participating Community College accounted for 30 % of the Research Assistants, with the remaining 70 % at the remaining ten Senior Colleges of CUNY.

The City University of New York is one of many institutions that are now hosting or have hosted our graduates in their pursuit of graduate education. A majority of the respondents to our survey, 20%, are continuing their academic careers in CUNY in the STEM disciplines.

(Data compilation - Nelcida Rodriguez)

NEW YORK CITY LSAMP ATTENDS HOUSTON LSAMP CONFERENCE

In their own words...



LSAMP SCHOLAR MARIE THOMAS

I've given poster presentations before, I was one of those students who would kind of walk away from my poster and check out the posters of the other students for fear that someone would actually come up and want to talk to me. Not only would I have to stand by my poster, there would be judges walking around asking me questions. I was really looking forward to that!

Upon my arrival I discovered that I would have to present on the first day of the conference. I was pretty calm until Dr. Brathwaite decided to have us practice our presentations. The first time I tried, I pretty much fell apart. I figuratively crashed and burned. I was reminded that everything I needed to say was pretty much on my poster. It was also mentioned that no one knows more about my research than I do and if there is a question that I cannot answer it's okay to say that I did not know, but it is also up to me to find out. After some time of staring at, contemplating my poster, and thinking about my presentation strategy, I had Dr. Brathwaite come over, and I repeated my presentation and I actually did better. I was pretty nervous during the actual judging, but I found that presenting got easier as more people came up to me and asked me questions. And I was able to check out the posters of other students without straying too far from my own.

When I decided to major in a science discipline, I thought I could hide away in my lab and do my work. But the one thing I've learned is that it's important to make what you are doing known. Not only so that you can get credit for it, it allows for new ideas and in making yourself known to others. Research doesn't seem to mean that much if no one knows what you're doing. This is probably one of the most important things I learned as an AMP scholar.

By Marie Thomas - Queens College of CUNY

We were all very pleased to have attended the Third Annual Houston Louis Stokes Alliance for Minority Participation Undergraduate Summer Research Conference at Southwest Texas State University. We were delighted with the beauty of the college campus and the inspiration encouraged by the workshops and guest speakers.

The workshops were geared to motivating undergraduate students not only to graduate and obtain a degree, but also to proceed on to becoming graduate students. Workshops and programs such as the Houston LSAMP Conference help undergraduate students to realize that they are capable of performing graduate level work, if they are properly prepared for what is ahead of them. The workshops certainly help students by giving them some of the tools that they will need to continue on to new academic heights.

"One of the workshops that were really helpful to me was, 'Developing Professionalism in Approaching College Studies', by John Mathews, Program Manager PROMES of the University of Houston. The workshop taught us how to develop time management and goal setting activities, topics which are rarely found or emphasized in the engineering curriculum. I think the workshop will be extremely useful now that I'm approaching graduate studies", notes Wilkin Deleon

Beresford Kirton who is about to enter the graduate program at City College in computer science discovered that he favored visual learning. "This is good to know as it gives me greater insight as to how I learn or how I am prone to learn, in my specific, comfortable manner. Being a college student I am most interested in acquiring sound techniques to improve my learning ability. These tools will aid me to improve my skills, skills that will be used during my entire college career."

Mary Anthony and Curtis Byrd, of the NSF Graduate Research Fellowships, and University of Georgia respectively, ran a "Graduate Research Fellowships and Graduate School Survival Techniques" workshop that was popular with a number of students. The detailed description of the NSF Graduate Fellowship for Research, being better prepared for graduate school, and strategies for success in graduate school will be invaluable to us in the future. These vital pieces of information can also be passed on to our fellow students.

At these events, it can be inspirational to hear from other minority scientists about their career paths. Dr. Roosevelt Johnson, Program Director of the Alliances for Graduate and Education and the Professorate, was very convincing regarding the need continuous career development and the importance of attending graduate school.

The event was a wonderful experience for each of us. We had the opportunity to strengthen our research presentation skills, to travel, and thoroughly enjoy ourselves at the same time. We look forward to attending many more research conferences.

Tania Cabrera - Borough of Manhattan CC of CUNY • Wilkin Deleon - City College of CUNY • Marie Thomas - Queens College of CUNY
Beresford O. Kirton III - New York City Technical College of CUNY

CITY COLLEGE AND MEMORIAL SLOAN KETTERING CANCER PARTNERSHIP

City College of New York and Memorial Sloan-Kettering are recipients of a National Cancer Institute award to establish a Cancer Center. The City College of New York and Memorial Sloan-Kettering will establish the Cancer Center under the leadership of principal investigators Dr. Karen Hubbard, (City College-Biology) and Dr. Bruce Rapkin, (Memorial Sloan-Kettering-Behavioral Sciences).

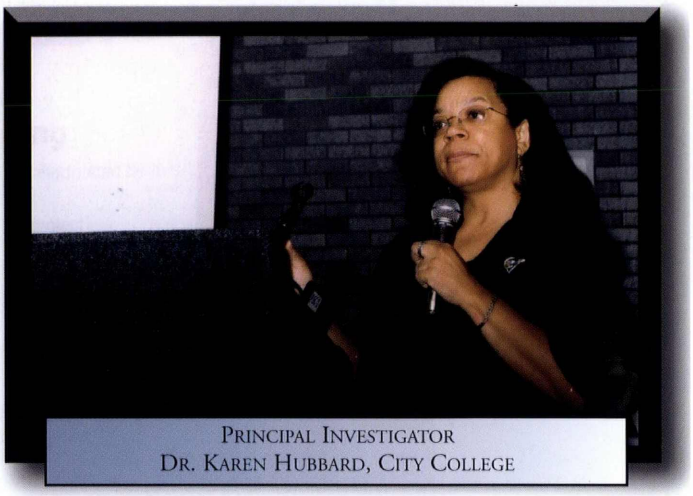
"The partnership is an excellent opportunity for us to utilize the resources and expertise of both institutions and Harlem to tackle an area of critical concern to the minority community. "

Dr. Karen Hubbard.

The purpose of the City College of New York and Memorial Sloan-Kettering Cancer Center (CCNY-MSKCC) Partnership is to plan and establish a strong, sustainable relationship between both institutions. The Partnership is supported by a National Cancer Institute award designed to foster collaboration between minority-serving academic institutions and comprehensive cancer centers. The goals of the partnership are to:

- *Encourage and support basic and applied cancer research initiated by CCNY investigators.*
- *Encourage and support research on health disparities and cancer burden in minority populations initiated by MSKCC investigators.*
- *Implement joint education and training opportunities to attract minority students at all levels to careers in cancer research, and to support their career development.*
- *Use the combined resources of our institutions to develop and evaluate innovative health outreach initiatives to reduce the impact of cancer in medically-underserved communities.*

During the first year, the partnership is undertaking five pilot studies. Each pilot is designed to contribute to the overall development of the partnership in three ways: by leading to on-going independently-supported collaborative research; by providing opportunities for student research and training; and by helping to set up the basic mechanisms for on-going collaboration between CCNY and MSKCC.



PRINCIPAL INVESTIGATOR
DR. KAREN HUBBARD, CITY COLLEGE

"The partnership is an excellent opportunity for us to utilize the resources and expertise of both institutions and Harlem to tackle an area of critical concern to the minority community," notes Dr. Hubbard.

Dr. Hubbard is an active mentor in student training programs (LSAMP and MARC/MBRS) and received an award for Outstanding Women Scientists from the Association for Women in Science in 2000. Dr. Hubbard is a molecular biologist, who studies the regulation of gene expression during cellular aging. She is also investigating the role of programmed cell death during aging. Her studies have implications for not only aging at the cellular level but for the initiation of carcinogenesis and age- related pathologies as well.

For more information, contact Margaret Michel, at: michelm@mskcc.org.

CONFERENCES 2002 - 2003

NOVEMBER 13TH - ANNUAL BIOMEDICAL RESEARCH CONFERENCE FOR MINORITY STUDENTS (ABRCMS) - NEW ORLEANS, LA

FEBRUARY 21ST - CUNY CONFERENCE IN SCIENCE & ENGINEERING - GRADUATE CENTER

APRIL 11TH - THE URBAN UNIVERSITY SERIES CONFERENCE - YORK COLLEGE

NYC LSAMP PHASE 3 continued from page 2

advising and career development expertise, and 3) an environment for graduate education and teaching opportunities. This core includes CUNY-based programs for graduate education and teacher education, NSF HRD focused programs, Federal Agency Partners, Foundations and National Organizations. Internships and cooperative activities will include significant research experiences for participating students, visits to the training sites by students prior to the start of training, mentoring relationships at the training site, and cost sharing by the partners. The LSAMP partnerships established in Phase I and II, will continue in Phase III.

ALUMNI CORNER

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am managing my own projects as a design engineer," she says. "I am also the unofficial fiber and ethernet expert in the ABC Broadcast Engineering Group."

Another aspect of the GISS experience which has served Ms. Holder well is the opportunity to present her research to audiences of her peers and accomplished scientists. "The first time that I spoke in public, Dr. James Hansen, the head of GISS, was in the audience, and I was so nervous," she says. "But, I went on to speak before an astronaut and Daniel Goldin, the head of NASA, so today, when I have to speak to my division president it is no big deal."

"GISS was wonderful and I miss it," Ms. Holder concludes. "I love my job, but had I been a younger student, I would have become a scientist. It was fascinating to try to determine what the climate was like ages ago. I loved every minute, and it was all through LSAMP funding."

I am managing my own projects as a design engineer," she says. "I am also the unofficial fiber and ethernet expert in the ABC Broadcast Engineering Group."

~Corey Holder

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