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The Center for Academic Resource Development

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# Table of Contents

Director’s Message iii
Prince George’s Community College Grant Program Highlights
   College and Career Transitions Initiative Consortium (CCTI) 1
   Analyzing Evidence: Identification and Instrumentation 2
   National Center for Aerospace Technical Education — SpaceTEC® 3
   Community Colleges Broadening Horizons Through Service Learning 5
   Quality Matters: Inter-Institutional Quality Assurance in Online Learning 7
   Π -Shop: The Mathematics Learning Center 9
   Learning Institute for South African Secondary Education (LISASE) 11

CARD Centers 13

The Dr. Vera Zdravkovich Award 17

Abstracts for Grant Programs Active in Fiscal Years 2004 & 2005
   Community and College Outreach 19
   Faculty Development 20
   International 22
   K-12 24
   Student-Centered 26

Partners & Collaborators for Grants Active in FY04 & FY05 32

Awards for Programs and Personnel Supported by CARD 33

Proposals Funded, Pending, or Declined in Fiscal Year 2004 34

Proposals Funded, Pending, or Declined in Fiscal Year 2005 35
Message from the Director

Welcome to the Center for Academic Resource Development Bi-annual Report!

Grant funding has been greatly enriching the educational environment of Prince George's Community College. Never has this been more true than in the past two years. During fiscal years 2004 and 2005 the college received two new Minority Science and Engineering Improvement Program (MSEIP) grants. The purpose of both is to increase the students’ course success rates in credit and developmental mathematics courses through expanded access to instructional technology. One project was to create the π-Shop, an area with a 65-workstation open computer lab and three small-group conference rooms for Peer-Led Team Learning sessions. The second MSEIP grant is to complete a suite of three electronic developmental math classrooms and to support instructional technology training for credit and developmental mathematics faculty and staff. This project was begun with a $50,000 grant from the Philip Graham Fund. Higher success rates in mathematics courses will enable more students to take courses and major in science, technology, engineering, and mathematics (STEM) disciplines.

In another effort to increase the number of students majoring, receiving associate degrees, and transferring to 4-year colleges and universities in STEM disciplines, CARD wrote a proposal and was awarded almost $1 million by the National Science Foundation (NSF) to fund 1) the development of interdisciplinary modules and linked courses to help students succeed in mathematics and other STEM courses; 2) activities for STEM Collegian Center students; 3) workshops for STEM faculty at near-by universities; and 4) a Crossing-the-Line interdisciplinary conference for STEM fields.

Besides trying to increase the number of students successfully preparing for STEM careers, the college has been focusing on meeting another national and regional need – increasing the number of health care professionals. During the past two years, the college received a number of grants to help develop and equip the new Interdisciplinary Simulation Laboratory, a virtual 3-bed intensive care unit with an associated control room. Grants from the Maryland Association of Community Colleges (MACC) have enabled the college to purchase two additional Simulation manikins, a Noell Maternal and Neonatal Birthing Simulator with Pedi Blue Neonate Simulator, and 12 Tungsten 5 personal digital assistants (PDAs) to conduct a pilot project to enhance teaching and learning through the exploration of instructional uses of handheld mobile technology. MACC funding also supported the development of online courses in Medical Terminology, Medical Coding, Cardiopulmonary Physiology, and licensed practical nurse (LPN) to registered nurse (RN) Transition. These are the first on-line courses to be developed in the Health Sciences Division. The completed courses were uploaded to the MACC website and shared with all community colleges in Maryland.

The number of online courses at the college has increased dramatically in the past few years. The college has been aggressively training its faculty in online pedagogy; however, there are still questions throughout academe about the quality of online vs. face-to-face courses. Maryland Online is a consortium of Maryland community colleges, colleges, and universities that seat-share courses online, and which is headquartered at Prince George's Community College. The consortium submitted a proposal to the Fund for the Improvement in Post-Secondary Education
The Center for Academic Resource Development (FIPSE) to develop and implement a faculty-centered peer review-based process to certify the quality of online courses and online components. The proposal, Quality Matters, was funded; the process was created; faculty are being trained to be peer reviewers; and online courses are currently being reviewed. The process is replicable, and there are other colleges and universities throughout the United States who are interested in the process being disseminated.

Also, in the last two years, 134 South African math, science, and technology high school teachers and subject advisors, high school principals, and Department of Education officials have been on campus and at high schools, colleges, and universities around Maryland as part of the Leadership Institute for South African Secondary Education (LISASE). Included in the LISASE program were an orientation on the United States, job shadowing, computer software training, content area institutes, classroom pedagogy seminars, and a culminating leadership institute covering curriculum development, planning, and assessment. These South Africans have now returned to their country, and it is expected that their training will ultimately have an impact on tens of thousands of students.

These are just some of the exciting highlights. I hope you will read the following human interest stories about some of our projects and review the abstracts to see how busy we have been at Prince George's Community College!

Dr. Marilyn B. Pugh
Director, Center for Academic Resource Development

CARD Mission Statement

The Center for Academic Resource Development (CARD) supports the mission of Prince George's Community College by seeking public and private grant funding to enhance the academic and cultural life of the college community. CARD is a unique, faculty-driven center that works, both independently and with faculty, to develop fundable proposals and manage project awards in scientific, technological, humanistic, aesthetic, pedagogical, and cultural domains that impact county, state, national, and international constituents.
Prince George's Community College
Grant Program Highlights

COLLEGE AND CAREER TRANSITIONS INITIATIVE CONSORTIUM

Ever since she was a little girl, Donna Gaughan wanted to be a police officer. With persistence and determination and despite obstacles in her path, Gaughan was able to realize her dream. She served with the Prince George’s County Police for nine years before trading in her badge for a blackboard, now sharing her passion for her work in criminal justice as a professor at Prince George’s Community College.

Though Gaughan eventually found her way to a satisfying career in criminal justice, she realized that there are many young people interested in the field, but unsure of how to pursue that interest. Professor Gaughan and her Prince George's Community College teaching colleague, Major Larry Shanks, have taken on the challenge of helping high school students begin to pursue a career in criminal justice as project directors of the College and Career Transitions Initiative (CCTI) at the college.

CCTI is a national program with partnership sites throughout the country. Funded by the U.S. Department of Education (DOE) and the Office of Vocational and Adult Education (OVAE) and administered by the League for Innovation in the Community College Consortium, CCTI has as its goal effectively moving students from high school through college and on to careers. According to Professor Gaughan, “This grant helps create seamless transitions between the high schools, community college, four-year schools, and the workforce. The connections we are making help students cross the bridge from their secondary education through college experiences into their eventual careers.” Through a highly competitive process, Prince George’s Community College was chosen to provide national leadership through the initiative in Law, Public Safety and Security, one of five occupational focal areas for CCTI.

At Prince George’s Community College the initiative begins by introducing interested high school students to the field of criminal justice through partnering with local high schools including Potomac, Northwestern, Surratsville, and Laurel. At these schools, interested students can take one or both of the courses paid for by the grant: CJT 153-Law Enforcement and the Community and CJT 155-Juvenile Delinquency. The courses are taught by high school teachers who have attended a college teaching seminar taught by Professor Gaughan during the summer. While the students attend the courses at their respective schools, they receive credit for them at both their high school and at Prince George’s Community College, helping to pave their way to matriculating at the college upon high school graduation.
Another important component of the initiative at Prince George's Community College is a summer institute for the students attending the courses. The institute is designed to further acquaint the students with the broad field of Law, Public Safety and Security, and to give them hands on activities related to careers in the areas it encompasses including law enforcement, forensic science, and legal studies.

An additional unique feature of CCTI is that it provides funds for training high school students in the program who require developmental education to prepare them for college work. Through this aspect of the initiative, students get the training they need so that they are ready to seamlessly progress on to college level work upon completion of high school.

All of the students who have completed the high school portion of the initiative thus far will be enrolling in Prince George's Community College. Interestingly enough, according to Gaughan, most of the students will be their family’s first generation to attend college. “That’s part of the power of the grant,” Gaughan stressed, “they learn that if they work hard, their dream is within their reach.” For more information on CCTI, visit www.league.org.

ANALYZING EVIDENCE: IDENTIFICATION AND INSTRUMENTATION

The investigators arrive at the scene of a suspicious death and find a splattering of blood on the wall. There are strands of hair on the carpet next to the body and fibers on the victim’s denim jeans. Immediately, the investigators begin to use a Luma-Lite™, which illuminates trace materials, to search for other evidence. Then, the investigators begin packaging and sealing the evidence the crime scene has yielded. CSI Miami? CSI Las Vegas? No, it’s CSI Prince George’s Community College, as students in the college’s forensic science program begin to solve yet another case.

The forensic science program began at Prince George's Community College in 1999 under the leadership of Professor Raymond Harris. It is the only community college program in the nation that has an in-depth, complementary curriculum encompassing 16 forensic disciplines. The program is unique in that the forensic science professionals who teach this diverse curriculum all practice their special skills. The Forensic Science program articulates with the Forensic Science programs offered at University of Baltimore, University of Maryland University College, and Virginia Commonwealth University, allowing students to continue on to complete a bachelor’s degree.

Professor Harris said that he and his colleagues worked with “municipal, county, state and federal law enforcement and forensic science laboratory departments in Virginia, Maryland, Pennsylvania, Delaware and West Virginia to determine workforce needs” which led to the establishment of the program. Harris also established an advisory board with representatives from the Federal Bureau of Investigation, the Bureau of Alcohol, Tobacco and Firearms, the Armed Forces Institute of Pathology, the Drug Enforcement Administration, Maryland State Police Crime Laboratory, Prince George’s County Police Department Crime Laboratory, and the Prince George’s County Fire Department to help in the design of the forensic science curriculum.
In the fall of 2002, the college was awarded a grant by NSF to help further develop the forensic curriculum and to purchase equipment for the forensic sciences laboratory. As part of the grant activities, Dr. Raymond Gross developed an Analytical Instrumentation course along with a laboratory manual which focuses on teaching students about a variety of laboratory instruments and their application to forensic science. As a serendipitous outcome of his work in developing the course, Dr. Gross published a paper on the “Chlorine Rule for Br\textsubscript{n}Cl\textsubscript{n} Compounds” in the *Journal of Chemical Education*.

Another aspect of the development of the forensic science curriculum focused on the creation of problem-based teaching modules to be incorporated into courses in the forensic program. Professor Ray Harris and Professor Laura Ellsworth, a program faculty member and the Coordinator of the Administration of Justice Collegian Center, along with other forensic science experts, developed 12 modules to be incorporated into courses in the forensic program. According to Professor Ellsworth, “The teaching modules were designed to simulate real world crime scene analysis. Each of the modules focuses on a particular kind of analysis of crime scene evidence such as hair, fiber, or fingerprints. Each module also utilizes the laboratory equipment purchased through the grant.”

The grant provided for the purchase of a mobile Payton Forensic Science Workstation\textsuperscript{TM} and a Luma-Lite\textsuperscript{TM}. The state-of-the-art forensic Workstation trains entry-level forensic scientists to analyze evidence collected from a crime scene. The Luma-Lite\textsuperscript{TM} is a powerful light source that allows the forensic investigator to search for evidence on walls, floors, bed sheets, clothing, and entire bodies. The combination of the Luma-Lite\textsuperscript{TM} and the forensic Workstation will detect evidence such as hair, fiber, accelerants, explosive residues, gasoline, bite marks, ink strains, and trace evidence at a crime scene or in the forensic crime laboratory.

The grant also provided for two summer science institutes for high school students interested in pursuing a career in forensic science. The institutes trained the students in the basics of the discipline while also giving them the opportunity for hands-on, mock crime scene analysis.

In 2004, Professor Raymond Harris was honored by the Maryland State Department of Education, receiving its award for “Change Agent—Postsecondary” for his pioneering work establishing the college’s forensic science program.
NATIONAL CENTER FOR AEROSPACE TECHNICAL EDUCATION-
SPACETEC®

The large screen in the college’s Rennie Forum fills with images of the stuff of outer space—diagrams of planetary rotations, drawings of orbiting satellites, photos of mission ready astronauts. It is the night students in the two week long Space Scholars Institute have been preparing for, the chance to share with their family and friends their capstone group presentations. The presentations bear the titles of their investigations: Manned Missions; Space Disasters; Planetary Missions; Slingshot Orbitals; Satellite Types, Orbits, and Orbital Mechanics; and Soldering and the Space Bug.

Although the primary goal for the students’ capstone event was to learn about their topics through in-depth investigation, they also learned how best to present that knowledge to their audience of family and friends eager to share their discovers. The students’ lessons included the use of presentation technology including Power Point. According to Professor Allison Miner, Director of the Space Scholars Institute, “The real learning takes place when they give their final presentation for the first time, and we critique them.” The “polishing” that occurred during the week is obvious that night, and the student presentations are received with hearty applause.

While the group presentations are the capstone event for the Institute, there have been a host of activities along the way. Professor William Lauffer, Chair of the Department of Engineering Technology, explained: “Students participated in a variety of hands-on activities which involved wireless communications, remote sensing, model rocket launches, flying radio-controlled model airplanes, tracking satellites, soldering, and assembling a ‘space bug,’ a miniature robot which moves about on battery-powered electric motors.”

Students also took field trips, one to NASA in Greenbelt, where they visited the largest “clean” room in the world, and another to the Applied Physics Laboratory of Johns Hopkins University where they saw the New Horizons satellite scheduled to journey to Pluto.

For participant Shawn Liberto of Laurel High School, the highlight of his learning at the Institute involved “Satellites. In the future, maybe one day I’ll work on them,” he said. For Harrison Chau of Glenelg Country School, “the exposure to the aerospace industry from the guest speakers” was not to be missed.

The Space Scholars Institute, designed for 10th through 12th grade students, is funded through an NSF program called SpaceTEC®. The program has as its centerpiece the National Center for Aerospace Technical Education, which is housed at Brevard Community College in Florida. The
mission of the center is to create and implement an educational process, industry-driven and government-endorsed, to help sustain a globally competitive aerospace technical workforce. Prince George’s Community College is a partner in this process, conducting the Space Scholars Institute in an effort to strengthen recruitment into the college’s space technology and engineering technology programs.

The Space Scholars Institute has been conducted for the past two summers (2004 and 2005) at the college. Prior to her retirement, Dr. Patricia Cunniff was the Co-Principal Investigator for the grant. Professor Lauffer has now assumed this role. For more information on SpaceTEC®, visit www.spacetec.org

COMMUNITY COLLEGES BROADENING HORIZONS THROUGH SERVICE LEARNING

Sixty years ago, the American forces hit the beach at Normandy and changed the course of World War II. Veterans of that war as well as the nation’s other military actions are among the approximately 1700 American veterans who pass away each day. Far too soon, there will be no one left to tell their stories—unless their stories are recorded now for posterity. That mission has been embraced by the Library of Congress (LOC) through its Veterans History Project. A Community Colleges Broadening Horizons through Service Learning grant along with the college’s Book Bridge Project have enabled Prince George’s Community College to join in supporting the LOC mission.

Awarded to only a handful of community and technical colleges nationally, the prestigious Horizons grant is administered by the American Association of Community Colleges and supported by the Corporation for National and Community services. Professor Betty Habershon, Accounting Department Chair and Service Learning Program Liaison, and Dr. Randy Poole, Service Learning Coordinator, are co-directors of the college’s grant. According to Habershon, the LOC project is one of many affected by the Horizons grant because the “grant’s purpose is to help develop faculty to integrate service learning into their courses to support the students in active learning and thereby engage them in their community.” Service learning focuses on combining service to the community with classroom learning to address local needs. Students learn about civic responsibility while also honing their academic skills through critical reflection on their experiences. To help encourage and develop faculty to spearhead service learning initiatives, the grant has provided ongoing training for faculty in integrating service learning into their courses, exploring civic responsibility, and facilitating students’ reflections on their service learning experiences. One of the highlights of this training was the Community Engagement Forum held in December of 2004 where faculty interested in incorporating service learning into their courses met with representatives from over 40 non-profit community groups.

A variety of initiatives have already taken place in conjunction with the grant with the Veterans History Project being one of the most ambitious. Every year the college’s Book Bridge Project selects a book to be read by students, faculty, and the community, and schedules a host of activities associated with the book. The selection for the 2004-05 school year was a memoir entitled Easier Said by World War II veteran LeRoy Battle, who was a Tuskegee Airman. One
of the most significant activities associated with the book was the college’s participation in the LOC project. Through the Horizons grant, a trainer came from Richland College in Texas, one of the Horizons Mentor Colleges, to teach faculty and students oral history techniques. Then in collaboration with the Book Bridge Project, the college invited veterans to be interviewed about their World War II experiences by students from Prince George's Community College and Forrestville High School with the college's faculty facilitating the interchanges.

According to Book Bridge project director, Dr. Mary Brown, “It is one thing to teach students history, but another to expose them first hand to people who experienced life altering historical events—it often inspires students to do more with their lives—an oral history project like the Veterans History Project at the Library of Congress does this.” Students too echoed what they learned from participating in the LOC project. A working evening student, initially dubious about participating, became a convert: “At first I thought participating in the Veterans History program would be a waste of my time and money (I took off work), but I learned a lot of history and am happy I participated. I left there with respect and gratitude for the Veterans of the United States military.”

Other projects associated with the Horizons grant as well are spreading the word about the value of service learning. One of the first projects affiliated with the Horizons grant created a partnership between Drew Freemont Middle School students and the students and faculty in business and engineering at Prince George’s Community College. The goal of the partnership focused on linking community college participants with the middle school students to help the youngsters complete a patent replication project. As a part of this project, the students created a model for a warehouse elevator using Legos®, developed a marketing plan for the elevator, and then designed a presentation on the elevator in PowerPoint which they then gave at a countywide business competition for middle school students.

Another Horizon affiliated service learning project trained Prince George’s Community College students, including members of the seniors program, to assist in tax preparation for community members below a designated income level through the Volunteer Income Tax Assistance (VITA) program.

According to co-director Randy Poole, there are many more activities associated with the Horizons grant to come including a program to “help students develop leadership skills and put those to use through service learning activities in the community. The purpose of the program is to help support our students as future community leaders.”

To learn more about the Community Colleges Broadening Horizons through Service Learning grants, including what colleges previously awarded the grant have done, visit the American Association of Community Colleges website at www.aacc.nche.edu and click on service learning.
QUALITY MATTERS:
Inter-Institutional Quality Assurance in Online Learning

Certainly one of the most profound changes in hundreds of years in the way that education takes place is online learning. With online courses, students are not bound by the constraints of time and place. By taking courses with asynchronous learning, students can literally participate in their online classes 24-7, and they can do so anywhere--on a business trip to Bulgaria, stationed with the military in Iraq, sightseeing in Australia, or curled up in pajamas with an early morning cup of coffee in their own hometown, U.S.A. Online learning brings students education anytime and from anywhere an Internet connection is available.

Small wonder then that the number of online courses at America’s institutions of higher learning have burgeoned, with the online offerings at Prince George’s Community College reflecting this exponential growth. In fall of 2000, the college offered 19 course sections online with an enrollment of 419; in fall of 2004, 181 course sections were available online with over 3,000 students enrolled.

The rapid and pervasive growth of online learning has brought its own challenges to educators resulting in the pioneering of online pedagogy. But just how good is this pedagogy? While a wealth of standards exists to substantiate what constitutes a superior face-to-face course and an outstanding face-to-face instructor, what are the rules in cyberspace? To answer this query, enter Quality Matters, a three year (September 2003 through August 2006)), half a million dollar grant awarded to Prince George’s Community College by FIPSE, the Fund for the Improvement of Postsecondary Education. Quality Matters, subtitled Inter-Institutional Quality Assurance in Online Learning, is creating a continuous improvement model for assessing and assuring the quality of online courses.

The Quality Matters (QM) project is run by Maryland Online (MOL), a consortium of 14 community colleges and five four-year institutions in the state. The consortium saw as one of its primary tasks the creation of a web-based rubric to be used to evaluate individual online courses across institutions. To create such a rubric, the whole issue of what constitutes quality in education first had to be investigated. Through the examination of the research literature and established national standards, the QM project identified 40 elements, distributed across eight broad standards, which have been shown to positively impact student learning. These elements were then used to create the web-based rubric with each element receiving a rating from 1 (important) to 3 (essential). For each essential element, annotations and multiple examples from real online courses were compiled.
Having created the web-based rubric, the next task for the QM project was to implement it. The process QM has pioneered is the creation of three-member faculty teams trained in the use of the rubric to review online courses. Each team consists of one content expert and at least one member of an institution other than the school that offers the courses. The team members, all volunteers, work individually and collaboratively and with the course’s instructor to review the course based on the rubric. At the end of the course review process, the instructor receives a report that discusses how well the course met the standards established by the rubric. The report highlights, in particular, excellence in accomplishing the elements, and also provides concrete recommendations for improving the course. QM also provides faculty with instructional design support for implementing the review team’s recommendations. After a course has gone through the review and revision process, it receives Quality Matters Recognition, indicating that it has successfully demonstrated all 3-point essential review elements.

Dr. Carolyn Hoffman recently had her History 141 (American History to 1877) online course at Prince George’s Community College reviewed by QM and received accolades for her work. According to Hoffman, “I think that the most valuable thing that I got out of the entire experience was the thinking about the course that I did before the evaluation process actually began. When I sat down with the rubric over the summer and evaluated my course myself, it forced me to rethink some of the things I do and why I do them. I changed a few things before the evaluation. Primarily, I added better explanations for the students as to why I was asking them to do certain assignments and what benefit doing these assignments would provide them. I think I was able to do a better job in organizing the entire course as a coherent whole.”

According to Mary Wells of Prince George’s Community College, co-director of QM along with Dr. Christina Sax of the University of Maryland University College, both faculty who have had their courses reviewed, like Dr. Hoffman, as well as the reviewers themselves have benefited from the project. Faculty who are reviewed receive the opportunity to improve their online course and receive access to instructional design support and professional development opportunities. Reviewing faculty have noted a positive impact on their own online courses through working with the rubric and the standards it promotes.
Each year of the project more courses are being reviewed and more faculty trained in the use of the rubric. To date the grant has reviewed 37 courses and plans to review at least 65 courses during the project. Currently, 235 people from 60 different institutions have been trained as QM Peer Reviewers. Training is delivered face-to-face and online, allowing for participants from around the world. In the future, QM plans to institute online rubric training, the adaptation of the rubric to blended and face-to-face courses, and research projects focusing on the impact of the QM process and rubric on student learning.

QM is already having a marked impact on Maryland’s online courses and through ongoing dissemination of the QM model, its influence is beginning to grow nationally as well. The processes and tools the project employs are replicable, reliable, scalable, and sustainable—features that will make QM valuable to online classes offered anywhere, anytime. Visit the QM website at http://www.QualityMatters.org.

**Π -SHOP: THE MATHEMATICS LEARNING CENTER**

Prince George’s Community College commenced its participation with Clark Atlanta University (CAU) and the Minority Science and Engineering Improvement Program (MSEIP) in the fall of 1996, when the Mathematics Department was involved in a CAU grant that funded Prince George's Community College’s first mathematics computer classroom. MSEIP is a Department of Education program, and since in 1999, Prince George's Community College has received three direct MSEIP grants. The principle goal of each of these three-year grant activities is to increase the students’ course success rates through expanded access to instructional technology for students enrolled in credit and developmental mathematics courses which are required of majors in science, technology, engineering, and mathematics (STEM).

Dr. Eldon Baldwin wrote each grant proposal and has served as project director for each grant. Primary faculty activity coordinators for the grants include Professors Peggy Beck and George Perkins in the Math Department and Professors Roxanne King, Peter Speier, and Brenda Teal in the Developmental Math Department. Department Chairs Cathy Cant (math) and Vincent Bates (developmental math) have been essential to the success of all of the grant-funded activities.

Prince George's Community College’s credit and developmental mathematics programs have benefited greatly from the collaborative relationship with CAU and MSEIP. Almost $1 million in MSEIP support has enabled the college to convert four traditional mathematics classrooms into computer classrooms, install multimedia instructor workstations in seven other traditional mathematics classrooms, and create a new mathematics learning center named the Π-Shop. These grants have also supported a variety of faculty technology workshops each semester for the past six years, and computer-based learning has been added as a significant instructional support component in at least ten different credit and developmental mathematics courses.

Creation of the Π-Shop, which opened in February 2005, is by far the most ambitious technology project that the Mathematics Department has undertaken during the past decade. Three former
adjacent classrooms in Marlboro Hall were converted into a 65-workstation open computer lab, three small-group conference rooms, a small storage closet, and an office—with the entire area now known as the \( \pi \)-Shop. Lab and Peer-Led Team Learning (PLTL) sessions now meet in the \( \pi \)-Shop rather than in classrooms. Freddie Sanford, a retired public school mathematics teacher and principal, and longtime adjunct faculty member has been hired as the \( \pi \)-Shop Coordinator.

Currently, the \( \pi \)-Shop is open for more limited hours, but the goal is to eventually provide walk-in student access to the open lab Monday through Saturday for a total of 65 hours each week. There are plans to staff the center with two assistant lab managers and a collection of part-time classified tutors who are cross-trained to perform a variety of duties. These duties will include Peer Led Team Learning (PLTL), a Triadic Tutoring Model (TTM) for mathematics tutoring, and becoming familiar with the various mathematics learning software packages employed by the department.

The three small-group conference rooms in the \( \pi \)-Shop have been designed to serve multiple purposes. When an instructor chooses to employ the PLTL model, three experienced students (tutors) are employed and trained to serve as group facilitators. The class is divided into three learning teams, and during one class hour each week, each of these teams meets with its own facilitator in one of the \( \pi \)-Shop’s small-group rooms to work together on a cooperative problem-solving workshop.

When not being used for PLTL, the small-group conference rooms are available for informal small-group study, individual study, and small-group tutoring sessions. Each room is being equipped with a computer and data projector. Each computer will employ a wireless mouse and keyboard to facilitate use in group settings. A new device named Sympodium has been purchased for use with these computers. Sympodium is an interactive flat screen device that can be easily moved from room to room and connected to any computer. A light pen can be used to run virtually any software program and to simultaneously write on the Sympodium screen, allowing everything that appears on the Sympodium screen to be projected onto a wall mounted screen where everyone else in the group can see it.

Sympodium is of particular interest to \( \pi \)-Shop faculty and staff because of its capability to record these screen images along with a simultaneous audio track. There are plans to systematically record tutoring sessions, mathematics lessons, and technology demonstrations. These various sessions could be saved, edited as necessary, and copied to CD-ROMs and/or DVDs. Copies of these sessions could then be organized into a library of specialized lessons that can be used by instructors, individual students, and study groups. There are also plans to investigate ways in which these materials could be broadcast on the college’s cable channel and also be made available for direct access via the Internet, plans which will expand the reach of the \( \pi \)-Shop even further.
A group of newly arrived visitors from South Africa comprised of secondary school science and mathematics teachers and school administrators stands near the U.S. Capitol patiently awaiting a tour. The wait proves longer than anticipated. One of the teachers suggests that the group sing, a favorite South African pastime. Soon, with some instruction from one of their American hosts, the sound of a song new to the visitors begins to waft sweetly through the air—the American Star Spangled Banner. The South Africans follow the American anthem with their own national anthem, with each of its four verses sung in a different language—Xhosa, Sesotho, Afrikaans, English—reflecting their country’s multiculturalism. Then it is time for the tour.

The magic of this spontaneous moment of cultural exchange has been repeated many times in the past three years, a serendipitous byproduct of a U.S. Agency for International Development South Africa (USAID/SA) cooperative agreement known as the Leadership Institute for South African Secondary Education (LISASE). The grant provided professional development opportunities through Prince George’s Community College and its partners to three different groups of South African teachers and subject advisors, administrators, and provisional, divisional, and national Department of Education officials. Over the grant’s three-year time span a total of 134 educators representing nine provincial education departments in South Africa took part in the training.

According to grant writer and project director, Dr. Marilyn Pugh, the purpose of the grant was to “help to overcome the education inequities under apartheid by providing professional development opportunities to South African educators. This training is intended to improve the teachers’ capabilities to teach math, science, and technology to historically disadvantaged students and to improve school management.”

As a part of the 10-week professional development program, participants engaged in a wide variety of activities including job-shadowing, on-the-job training, student teaching experiences, leadership development, as well as math, science, and technology institutes and technology and pedagogy workshops. Dr. Mary Helen Spear, project manager for LISASE, noted the diversity of learning experiences the participants have had: “Our South African educators learned about physics through studying a roller coaster ride at Six Flags, conducted treasure hunts using a global positioning satellite (GPS), developed mind-maps using Inspiration® software, created web pages and PowerPoint presentations, built computers and networked them, and became experts at using graphing calculators.”
Nokuthula Pamela Xulu, an 11th and 12th grade teacher from the Province of KwaZulu Natal, praised her participation in LISASE saying, “I benefited a lot from the project in terms of technology training and the teaching of physics and chemistry. I also benefited from the exposure we received in learning about new ways of teaching which really made us grow.” Lucas Ntuli, also an 11th and 12th grade teacher from KwaZulu Natal, echoed Xulu’s thoughts saying, “This has been a wonderful professional development opportunity. We’ve learned about different teaching strategies, how students learn, and different styles of cooperative strategies to solve the problems of large classes. We’ve not only been given the application of teaching and learning, but also we’ve been given strategies to use low tech alternatives if necessary.”

Both Xulu and Ntuli also stressed the importance of the skills they have learned not just for the classroom, but for the management of schools themselves. According to Ntuli, “We’ve been given a new way of thinking about how to solve problems. We’ve been empowered as teachers to be change agents for our educational system.”

The changes being wrought by LISASE trained teachers and administrators are perhaps already beginning to take place. The Johannesburg high school operated by Rand Afrikaans University recently received the Most Improved School in Math and Science Award as well as recognition as the best Dinaledi school (magnet school) in Guateng Province. The school’s principal was a 2003 participant in the LISASE project.

The consortium partners who contributed to the success of the LISASE program include: Maryland State Department of Education, Garrett Community College, the College of Southern Maryland, the University of Maryland College Park Center for Teaching Excellence, Capitol College, the Prince George’s County Public Schools (Charles Herbert Flowers High School, Eleanor Roosevelt High School, Oxon Hill High School), the Garrett County Board of Education (Northern Garrett High School, Southern Garrett High School), the Anne Arundel County Public Schools (Annapolis High School, Broadneck High School, Old Mill High School), the Charles County Board of Education (La Plata High School, Thomas Stone High School, Westlake High School), Montgomery Blair High School, DeMatha Catholic High School, Prince George’s County Workforce Development Corporation, and WorldWise Services, Inc.
CARD CENTERS

Health Sciences Resource Center

Professor Marie York, Director

The primary role of the Health Sciences Resource Center is to assist in the advancement and growth of academic health programs in response to community need for specialized practitioners in the health sciences.

The Health Sciences Resource Center joined the Center for Academic Resource Development (CARD) in fall 2000 to assist in grant funding opportunities, secure donations and implement new instructional projects for the health sciences division.

The Health Sciences Resource Center has secured relationships and partnered with the Maryland Association for Community Colleges, the Association of American Colleges and Universities, the Prince George's County Health Department and the Maryland Department of Health and Mental Hygiene to assist in funding and support for advanced instructional technology, development of a state-of-the-art interdisciplinary simulation laboratory, HIV/AIDS education and Tobacco Prevention and Control.

The Maryland Association of Community Colleges (MACC TEC) funded four grants during FY 04-05 totaling $72,000.00.

Interdisciplinary Simulation Laboratory Project. The development and progression of the Simulation Laboratory has been guided through the Health Sciences Resource Center. The simulation lab is almost completed with digital recording features, a control room, 3 simulation manikins and monitoring systems. The technology housed in the lab was completely funded through grants from the MSDE Perkins Fund and the Maryland Association of Community Colleges.
The Humanities Resource Center seeks to uphold and advance the role of the humanities (history, literature, people, their ideas, and values) and related arts in the college and surrounding community.

Over the past ten years the Humanities Resource Center has created programs that have attracted prominent scholars and artists who have presented classical and contemporary topics from Greek mythology to slavery and the Civil War, from the development of modern China to the music and culture of the blues. The Humanities Resource Center's award-winning programs and activities have reached out to thousands in a variety of local, state, regional, and national audiences. The Humanities Resource Center initiates and helps others in the conception, development, funding, and operation of humanities programs. It operates in an entrepreneurial fashion, identifying needs, bringing together people, and assembling resources. It relies heavily on voluntary contributions of time, talent, effort, and money from members of the college community in cooperation with individuals and agencies outside the college.

Some examples of past and present Humanities Resource Center programs include

**For College Faculty**
A $25,000 focus grant from the National Endowment for the Humanities supported a year-long faculty seminar titled Aristotle and a World of Wonder. Fifteen faculty members attended ten half-day seminars designed to provide a better understanding of the origins of their academic disciplines as well as an appreciation of why and how their disciplines rest upon the framework established by Aristotle. Six distinguished Aristotelian scholars from Georgetown, Notre Dame, Pittsburgh, Northwestern, and Harvard Universities lectured and facilitated discussions in the following areas: metaphysics, ethics, politics, nature, rhetoric, poetics, and the origins of European universities. Faculty participants will develop and share their projects with their own academic areas and the faculty at large.

**For Secondary School Teachers**
Freedpeople and Southern Society in the late Nineteenth Century: Learning and Teaching from the Documents—a national summer institute in collaboration with the Education Division of the National Archives and the Freedmen and Southern Society Project of the University of Maryland, funded by the National Endowment for the Humanities.

**For Middle School Students**
The Maryland Summer Center for Civil War Studies—a two-week program for talented and gifted seventh and eighth graders, funded by the Maryland State Department of Education.

**For the General Public**
The Blues Project—an award-winning eight-month series of lectures and demonstrations, film series, photo-documentary art exhibit, festival, program guide, and public radio series, bringing scholars and musicians together in educational outreach to the community, funded by the NEH and others.
Science and Technology Resource Center

The Science and Technology Resource Center works to increase funding opportunities for faculty involved in science, technology, engineering, and mathematics.

Programs of the Science and Technology Resource Center focus on providing increased opportunities for our students, strengthening faculty skills, and enhancing instrumentation and technology at the college. Over the past two years, the following grant-funded programs were active at the college.

Support from the National Science Foundation (NSF) has enabled the college to strengthen faculty skills in forensic science and to add related instrumentation that can be used in our forensics and organic chemistry programs. The grant has also produced course modules, a forensics chemistry course, and summer institutes for high school students.

Supported by a planning grant from NSF for a Cybersecurity Regional Center, CyberWATCH, the college with its multi-state partners has trained faculty in information assurance and has submitted a proposal to develop a strong network security curriculum at community colleges in the region.

Prince George's Community College is also a partner in the NSF National Center for Aerospace Technician Training. Through this multi-institutional activity, the college has strengthened faculty skills, hosted a national workshop, and promoted its space technology program.

The college has received two new Minority Science and Engineering Improvement Program grants, funded by the U.S. Department of Education. These grants have provided significant infrastructure support for computer laboratories and computerized classrooms for our mathematics and developmental mathematics programs.

A STEP program grant from NSF has provided funding for the development of interdisciplinary modules and linked courses to help students succeed in mathematics and other science, technology, engineering, and mathematics (STEM) courses and for activities for STEM Collegian Center students such as field trips, research, civic engagement, and performance awards.

Prince George's Community College has also been the lead institution for a United States Agency for International Development (USAID) grant to provide training in mathematics, physics, chemistry, and information technology in the U.S. for South African educators. Another USAID-funded project provided I.T. training to high school teachers in Rwanda.
Teacher Education Resource Center

Dr. Patricia Basili, Director

The Teacher Education Resource Center is concerned with all aspects of the teaching profession.

The Center works hand-in-hand with the Department of Teacher Education to:

1) promote interest in a teaching career for early childhood, elementary, middle and high school students.
2) offer in-service content enhancement for current teachers.
3) help career changers prepare for a teaching career.
4) assist conditionally certified teachers achieve standard certification.
5) help all teachers and paraprofessionals meet the ANo Child Left Behind® Requirements.
6) assist other community colleges to offer standards-based science and mathematics courses for pre-service teachers.
7) provide a smooth transition for Associate of Arts in Teaching graduates to four-year institutions.
8) allow Maryland’s community colleges to be effective in assisting with the current teacher shortage.
9) grow our own teachers for Prince George’s County.

The Teacher Education Resource Center’s funding sources include the Maryland Higher Education Commission Title II Funds, the Department of Education, the National Science Foundation, and subcontracts with the Prince George’s County School System. We are partners with the University of Maryland College Park, the University of Maryland University College, and Towson University in projects that directly impact current and future teachers.

Our closest partner is the Prince George’s County School System (PGCPS). Through interaction with the Office of Human Resources, Certification, and the Supervisors of the various content areas we discern what is needed and how we can help. The first grant funded program for teachers was A Leadership Institute for Science Teachers in 1987. Forty-eight middle school teachers came to our campus for three weeks of summer work in science content. This concept evolved into the Summer Science Institutes that have served over 1,200 teachers in the past eighteen years. The 2005 Institutes were totally funded by the PGCPS, and the Teacher Education Resource Center is already discussing innovations for 2006.
THE DR. VERA Z AWARD

What is the Power of One? How much can one idea change the lives of others for the better? These are the questions that Dr. Marilyn Pugh, Director of the Center for Academic Resource Development (CARD), asked the proposal writers, grant directors, and CARD staff being honored at the First Annual CARD Recognition Reception in the fall of 2001. The special “One” of the distinguished crowd Dr. Pugh had in mind with her rhetorical questions was the individual responsible for the very existence of CARD itself—Dr. Vera Zdravkovich. In 1987, Dr. Zdravkovich, fondly known as Dr. Z, began the Science and Technology Resource Center (STRC) which provided the genesis for what would expand and grow into the umbrella organization known as CARD today. Over the years, Dr. Z wrote a plethora of proposals and served as project director or principal investigator on a myriad of grants. Dr. Z helped garner funds for a wide variety of projects from organizations including the National Science Foundation, the United States Department of Education, and the Maryland Higher Education Commission. In short, Dr. Z put Prince George’s Community College on the national scene as a premiere institute known for its excellence in grant writing and managing.

Dr. Z’s projects, many of which have focused on teacher education and technology initiatives, have touched the lives of hundreds of high school teachers and students as well as hundreds of faculty and students at the college. Dr. Z’s hallmark is one of innovation, collaboration, excellence, and unimaginable energy. Her grant successes set a standard of excellence which has helped contribute to the college’s national reputation and which has fostered a culture of “grantsmanship,” leading many others to emulate Dr. Z’s success with successes of their own. At the first CARD Recognition Reception, CARD celebrated Dr. Z’s many accomplishments by naming an annual award in her honor. The “Z” Award is devoted to recognizing those members of Prince George’s Community College who rise to Dr. Zdravkovich’s standard by making significant contributions that impact the lives of students, faculty, teachers, and the community, both in the county and in the larger world community. The “Z” Award is a testament to the power of one individual whose ideas have changed the lives of many.

The winners of the Dr. Z Award have been:

♦ Dr. Joseph Citro, (2001) Professor of History, for almost a decade of service to the Humanities Resource Center serving as project director extraordinaire. Working along with Dr. Lyle Linville, former director of the HRC, Dr. Citro was half of an unbeatable grant development team that consistently won funds from the National Endowment for the Humanities, the Maryland State Department of Education, and the Maryland Humanities Council. Projects directed by Dr. Citro included the Maryland Summer Center for Civil War Studies, From Field to City: An African American Diaspora, The First of Three Centuries in Prince George's County, Blue Upon Gray: Maryland and the Civil War, Freedpeople and Southern Society in the Late Nineteenth Century, and Early Slave Cultures in the Tidewater/Chesapeake and Carolina Lowcountry. In 1998, the HRC received the Maryland Association for Higher Education, Distinguished Program Award. Dr. Citro’s efforts have helped establish Prince George’s Community College as a center for excellence in humanities grant funded projects.

♦ Dr. Patricia Cunniff (2002) for her many outstanding contributions in conceiving and implementing innovative and cutting edge projects, serving as project director or co-director on at least 20 proposals, and bringing in over $1.5 million in grant revenues to Prince George’s Community College. Dr. Cunniff served as the Associate Director of Science and Technology Resource Center from 1990-1992 and became its Director in 1992. In 1995, she became the Coordinator Academic Resource Center (ARC) which encompassed both the STRC and HRS and was the precursor to CARD. Dr. Cunniff has consistently brought renown and honors to the programs she has
championed. In 1995, the STRC received the Distinguished Program Award from the Maryland Association for Higher Education in recognition of its efforts to strengthen science, mathematics, and technology education throughout the educational pipeline. In 1997, the ARC was awarded the TIAA-CREF Hesburgh Certificate of Excellence Award for recognition of the Center’s exemplary faculty development programs to enhance undergraduate teaching and learning. In 1998, the ARC won the Faculty Recognition Award from the Consortium for Community College Development for the Center’s excellence and innovation in teaching, learning, and leadership.

Ms. Diane Webb (2003) for her years as Coordinator of the office staff of CARD. Diane has been described as the “glue” who holds the Center for Academic Resource Development together. Diane oversees an office that never sleeps: drafting proposals for outside funding agencies, organizing and administering program activities and budgets with complicated logistics, and submitting progress and final reports on time. Under Diane Webb, all these things are done well, consistently, and flawlessly. Diane is well-organized, focused and affable. She is cool under fire. She always has a kind word and friendly smile for colleagues and friends. She leads a skilled staff that makes things happen. She is indispensable to the CARD directors.

Dr. Patricia Basili (2004) for directing the Summer Science Institutes (funded by the National Science Foundation and Maryland Higher Education Commission) for county school teachers since 1987, serving as Director of the Teacher Education Resource Center since 1999, and for her leading role as co-chair of the State’s Teacher Education Articulation (TEAC) Committee in the drive to create Maryland’s Associate of Arts in Teaching degree (2000), the first degree of its kind in the country. TEAC was charged with finding solutions to the teacher shortage, eliminating articulation problems, and recommending ways to recruit more education majors. Dr. Basili organized and led committees of two and four-year faculty to write the Maryland Outcomes for Teacher Preparation – the First Sixty Hours which has become a national articulation model. This model stresses a community college curriculum based on student outcomes rather than a list of courses. Dr. Basili secured financial support for this effort through a MHEC grant, and sub-awards from the Maryland State Department of Education and the PEW Foundation. Dr. Basili developed the course sequence for the AAT for Prince George’s Community College, wrote the rationale and needs segment of the approval document for five other community colleges, and started offering the A.A.T. for elementary teachers at Prince George’s Community College in fall of 2001. In 2001, NSF awarded Dr. Basili a grant designed to disseminate and assist other Maryland community colleges in offering mathematics and science courses based on the Prince George's Community College model.
ABSTRACTS FOR GRANT PROGRAMS
Active in Fiscal Years 2004 & 2005

Community and College Outreach

Annual Bluebird Blues Festival
This annual folk arts festival, open to the public, celebrated its 11th and 12th year. The Bluebird Blues Festival Planning Committee, which includes Barry Lee Pearson, a blues scholar, folklorist, and past performing blues musician, is responsible for the talent selection. Many of the artists, selected for their ability to perform as well as educate people about the blues, are National Heritage Award winners, people featured by Living Blues magazine, or others generally acknowledged to be masters of their art. The festival also includes craft and food vendors and hands-on activities for children. Almost 20,000 people attended the Blues festival last year. The festival program also includes an annual Black History Month event, “Jook Joint Saturday Night,” which celebrates both the blues and the rural institution of the “Jook Joint.”

Project Director: Mr. Jay Boyar
Funded by the Maryland State Arts Council and Prince George’s Art Council.
Proposal Writer: Dr. Isa Engleberg.

Chapel Forge Early Child Center/Infant & Toddlers Grant
Funding from this grant will enable the Children’s Developmental Clinic staff to train and supervise 20-25 volunteer student clinicians at the University of Maryland to work one-on-one with 20-25 special needs children ages birth to three who attend the Chapel Forge Early Childhood Center, Center Prince George’s County Public Schools. Children will attend the spring, summer, and fall clinic sessions.

Project Director and Proposal Writer: Dr. Paul Hahn.
Funded by CSG Foundation, Inc.

Cigarette Restitution Fund – School Based Tobacco Use Prevention and Cessation
This project is primarily targeted to students, staff and faculty of Prince George's Community College (PGCC). In addition, some activities are designed to extend beyond the college community enhancing the college's outreach mission. Analysis of survey data (Prince George's Community College – Tobacco Use Survey) indicated that a small percentage of faculty smoke, approximately 26% of students smoke and 33% of the staff identified themselves as smokers. Increasing awareness through peer education, advertising and educational programs will help to deter non-smokers from starting and reach those not identified in the survey. Many outside communities are reached through the college's health fairs and its annual Great American Smoke Out Event.

Project Directors: Professor Marie York and Ms. Pamela Thomas.
Funded by Prince George’s County Health Department.
Proposal Writer: Professor Marie York

Department of Family Services, Infant/Toddler Program Grant
This funding will enable 105 special needs infant/toddler, birth to three and their parents to attend the Children’s Developmental Clinic located at Prince George’s Community College and the University of Maryland College Park during the summer, fall, and spring clinic sessions.

Project Director and Proposal Writer: Dr. Paul Hahn.
Funded by Prince George’s County Government Department of Families Services.

Focus Group Grants Program Topic: Cybersecurity
The Computer Sciences Corporation (CSC) participated with Prince George's Community College in a focus group to help explore the needs of two key clients, NASA's Goddard Space Flight Center in Greenbelt and the National Security Agency in Hanover, for information security technicians over the next three to five years.

Project Director: Dr. Eric Grosse.
Funded by the Maryland Association of Community Colleges.
Health Education and Leadership Program (National Demonstration Site)
This was a continuation grant to support the HIV/AIDS Student Awareness Project as well as the Health Education and Leadership Program. The additional funding was used to produce a Healthy Living Brochure and to cover expenses related to a one day World AIDS Day Summit. The grant also assisted with the administration of a survey to assess the impact of this project on the college’s students.
*Project Directors and Proposal Writers: Dr. Charlene Dukes and Ms. Andristine Robinson.
*Funded by the National Association of Student Personnel Administrators.

Quality Child Care Initiative (QCCI)
This grant is funded through the Department of Labor's Quality Child Care initiative. Established in 1991, this initiative addresses the need for safe, affordable, available, quality child care while also seeking to change the culture of the child care industry from one dominated by low pay and high turnover to one of respected professional service. The initiative further seeks to develop and implement capacity building in child care training and related supporting systems built upon registered apprenticeship and other best practice models.
*Project Directors: Dr. Daniel Mosser and Dr. Paul Hahn.
*Funded by the U.S. Department of Labor.
*Proposal Writer: Dr. Ellen Rossman.

Rotary Club of College Park Grant (2004-2005)
Over the past 23 years, the Rotary Club of College Park has provided $4-6,000 per year to the University of Maryland’s Developmental Clinic program. The funds are used to provide scholarship assistance to children and families, to purchase classroom supplies, and to help support supplies used in the Volunteer Student Clinician Training Program. To date, the Rotary Club of College Park has provided the clinic with funds in excess of $100,000.
*Project Director and Proposal Writer: Dr. Paul Hahn.
*Funded by the Rotary Club of College Park.

Student Coalition on Tobacco: (PILOT)
Peers Initiating Leadership On Tobacco
A student coalition was developed utilizing Respiratory Therapy Program students. Six students were directly involved in initiating strategies on education and prevention of tobacco use on the college campus. Students developed a website, participated in several county and College events during the year and attended statewide meetings of the Department of Health and Mental Hygiene.
*Project Director: Ms. Beth Adkins
*Funded by the Maryland Department of Health and Mental Hygiene (DHMH)
*Proposal Writer: Professor Marie York

The Metropolitan Ebony Theatre (MET)
The college’s professional, resident African-American theatre company was founded to tell theatrical stories from the African American perspective while providing professional opportunities for artists of color. It is the only black professional theatre group in Prince George’s County. The MET also serves as a training source for the college’s theatre students, and its productions involve theatre professionals and volunteer members of the community. For the 03-04 season, the MET featured *The Trial of One Short-Sighted Black Woman Vs. Mammy Louise and Safreeta Mae* by Marcia L. Leslie, *Do Lord Remember Me* by James De Jonh, and the Shakespeare classic, *A Midsummer Night’s Dream*. The 04-05 season featured *Outdoor Recess* by Joy Jones and *Free Jujube Brown* written and performed by Psalmayene 24.
*Project Director: Professor Cheryl Collins.
*Funded by the Maryland State Arts Council and Prince George’s Arts Council.
*Proposal Writer: Dr. Isa Engleberg.

Faculty Development

CyberWATCH (Cybersecurity: Washington Area Technician and Consortium Headquarters) Planning Grant
The purpose of this grant is to plan for a full proposal for an NSF Regional Center of Excellence in Cybersecurity. The funds were used to survey businesses on their needs for information assurance technicians in the future, K-12 counselors on their needs for information security.
about this new field, and community colleges on their current courses and curricula in the field. Funds were also used for workshops and other professional development for community college, 4-year institution, and high school teachers. A proposal was developed for a Regional Center and submitted in the fall of 2004.

Project Director: Dr. Vera Zdravkovich
Funded by the National Science Foundation
Proposal Writer: Dr. Marilyn Pugh

Infusing Simulation Technology into Health Curricula
The funding for this project assisted in the development of computerized scenarios that can be used in different disciplines with the human patient simulator, SimMan. Having these computerized scenarios will permit SimMan to be used more effectively in both allied health and in nursing. Scenarios were recorded on CD-ROMs and then disseminated to community colleges in Maryland.

Project Director: Professor Cheryl Dover.
Funded by Maryland Association of Community Colleges.
Proposal Writer: Professor Marie York.

Mobile Computing Grants for Allied Health and Nursing
Funding has provided 12 allied health and nursing faculty with mobile technology to conduct a pilot project to enhance teaching and learning through the exploration of instructional uses of the Tungsten 5 personal digital assistant (PDA). The PDAs will be used in clinical and laboratory settings in fall 2005. This project will allow faculty and students to access medical information and apply documentation and presentation skills using handheld mobile technology.

Project Director: Professor Marie York
Funded by the Maryland Association of Community Colleges
Proposal Writers: Dr. Sandra Dunnington and Professor Marie York

On-Line Curricular Enhancement Award
Four allied health and nursing faculty (Professors Muriel Adams, Pamella Caesar, James Courtwright, and Vivian Kuawogai) developed on-line courses in Medical Terminology, Medical Coding, Cardiopulmonary Physiology and LPN to RN Transition. These are the first on-line courses to be developed in the Health Sciences Division. The completed courses were uploaded to the Maryland Association of Community Colleges website and shared with all community colleges in Maryland.

Project Directors: Professors Muriel Adams, Pamella Caesar, James Courtwright and Vivian Kuawogai
Funded by the Maryland Association of Community Colleges
Proposal Writer: Professor Marie York

Phi Theta Kappa: Preparing Tomorrow’s Science and Math Teachers – Round II
The goal of this three year grant awarded to Phi Theta Kappa International Honor Society is to enhance and expand the role of community colleges in preparing future K-12 mathematics, technology and science teachers. Eighteen community colleges were selected competitively from among 90 college applicants. These 18 colleges are mentored by faculty from previously funded NSF projects. Other activities include two national workshops for sharing and dissemination, mentoring services, a national monograph on programs at the selected community colleges, and a Best Practices Conference set for March 2006.

Co-principal investigator: Dr. Patricia Cunniff. Funded by the National Science Foundation.

Professional Development Award
Respiratory Therapy faculty were awarded professional development funds to attend a 3-day statewide annual conference on critical aspects of respiratory education and clinical practices.

Project Directors and Writers: Professors. James Courtwright and Eric Kriner
Funded by the Maryland Association of Community Colleges

Project Synergy: On-Line Training
Cross-institutional teams from six key discipline areas (science, mathematics, liberal arts, allied health/health management, teacher education and information technology) participated in a yearlong process of training, activity creation, and leadership development. Grant activities
focused on training faculty to identify, enhance, and effectively use a collection of interactive, technology-based, web accessible learning objects organized around the six discipline areas. The discipline-specific teams created guided activities that foster the effective use of these learning objects for both on-line and Web-enhanced classes. Participating institutions included 23 Maryland community colleges and senior institutions. Resources created as a result of this project can be found at http://www.mdfaconline.org.

Project Directors and Proposal Writers: Ms. Mary Wells and Ms. Jane Paulson.
Funded by The Maryland Higher Education Commission.

Quality Matters: Inter-Institutional Quality Assurance in Online Learning
MarylandOnline, a statewide consortium of community colleges and senior institutions, is developing a replicable pathway for inter-institutional quality assurance and course improvement in online learning by creating and implementing a faculty-centered, peer review-based, consortium-wide process to certify the quality of online courses and online components. The project is a 3-year project over fiscal years 04-06.

Project Director: Ms. Mary Wells.
Funded by the U.S. Department of Education, Fund for the Improvement of Postsecondary Education (FIPSE).

Title III-Strengthening Institutions
This grant served to strengthen curricula through infusion of technological applications and the use of collaborative active learning teaching strategies. Faculty development initiatives included hands-on experience in curriculum reform and instructional development as members of project teams. About one-third of all full-time faculty participated in curriculum reform teams over a 5-year period. Members of teams have presented their projects at the Annual Title III Grant Orientation Workshop, the Annual AFACCT Conference, and at national meetings. The Phase IV team members consisted of Professors Thomas Berault, Faith Breen, Anitra Butler, Janet McMullen, Allison Miner, Sally Sullivan, Kameswari Tekumalla, Barbara Thornton-Lewis, and Barbara Walton Vess. Members of the Phase V team included Professors Donnetrice Allison, Teresa Bridger, Catherine Cant, Charles Hendrickson, Nancy King, Sherry Kinslow, Tereza Marks, Kimberly Veney, and Joanne Weinberg.

Grant Coordinator: Dr. Vera Zdravkovich
Project Management and Evaluation Coordinator and Proposal Writer: Dr. Dennis Bartow
Project Activity Director: Dr. Robin Hailstorks
Funded by the United States Department of Education

International

Leadership Institute for South African Secondary Education (LISASE)
Through a competitively awarded co-operative agreement by USAID/SA, PGCC provided short-term training opportunities for South African high school teachers, school administrators and Department of Education officials in the U.S. over a three year period. Training focused on: teaching skills and strategies, advanced curriculum development methods, educational management expertise and materials development knowledge all as applied in the U.S. in high schools, community colleges and state education departments. Experience took the form of: job-shadowing, student-teaching type experiences, institutes and workshops. Teachers attended discipline specific institutes in technology, mathematics, physics, biology, and chemistry. Prince George’s Community College worked closely with USAID/SA and the South African Department of Education. Partners in the American consortium include the Maryland State Department of Education, Garrett Community College, the College of Southern Maryland, the University of Maryland College Park Center for Teaching Excellence, Capitol College, the Prince George’s County Public Schools (Charles Herbert Flowers High School, Eleanor Roosevelt High School, Oxon Hill High School), the Garrett County Board of Education (Northern Garrett High School, Southern Garrett High School), the Anne Arundel County Public Schools (Annapolis High School, Broadneck High School, Old Mill High School), the Charles County Board of Education (La Plata
This project is dramatically increasing Rwanda’s computer literacy through the targeted training of Rwanda’s secondary school teachers. Professors from PGCC and the National University of Rwanda (NUR) are providing direct hands-on training in Windows and Microsoft Office at the NUR using instructional CDs created by University of Maryland and Prince George’s Community College students. PGCC and NUR faculty have trained 65 secondary school teachers representing 65 secondary schools throughout Rwanda (32 were trained in July 2003, 33 more in June 2004). The schools (three from each province) and teacher-trainers were selected by the Ministry of Education, targeting schools that have computers. A goal of one-third women trainers helps promote the skills and competencies of women teachers. After receiving this “train-the-trainers” instruction, each teacher-trainer, outfitted with 20 complete sets of the training materials, returned to their secondary schools to conduct in-service training classes for other teachers in their schools. Both the trainers and the secondary school teachers who are trained at their respective schools (over 1000 so far) demonstrate competency in Windows and Microsoft Office before receiving a certificate of completion. In addition, the training provides information about how to effectively incorporate technology into teaching with the assistance of resources from MERLOT (Multimedia Educational Resources for Learning and Online Teaching). Finally, this project results in the wide dissemination of instructional materials developed for Rwanda by University of Maryland students as part of the UM/NUR Partnership Project funded by USAID. Unplanned consequences from the first round of teaching included trainers training students as well as teachers in their schools and also providing training for members of the community to raise money to purchase technology for the schools. PGCC faculty who have been involved with project activities include Dr. Nelson Kofie, Dr. Marilyn Pugh, Dr. Mary Helen Spear, and Dr. Robert Spear. Project directors: Dr. Robert Spear and Charles Ndagije, National University of Rwanda. Funded by the U.S. Agency for International Development.

Proposal Writer: Dr. Robert Spear.

The Rwanda Project: Subcontract with the University of Maryland
This subcontract supports faculty development in active learning strategies, the use of technology for teaching, and distance education at the National University of Rwanda. One part of the project focuses on the teaching of science to prospective secondary school teachers by the NUR’s Faculty of Education. A second part involves curriculum/course development and delivery in the Department of Computer Science.

Faculty involved: Dr. Mary Helen Spear, Dr. Robert Spear and Dr. Nadene Houser-Archiard. Funded by the U.S. Agency for International Development.

K-12

Community Colleges Broadening Horizons through Service Learning
The focus of this grant is to promote and expand service learning throughout the college and to provide a coordinator and a program liaison to direct a new Office of Service Learning. The office is designed to sponsor service learning conferences, workshops, and individual training for faculty, students, and community partners. Service learning is incorporated into such disciplines as English, history, international studies, speech, business, accounting, engineering, and nursing. For one of the service learning projects undertaken, Prince George’s Community College students worked with middle school students to study the history of immigration in the area since 1900. The college also partnered with a nonprofit organization that
promotes engineering, science, and computer fields among African-American youth. Other campus projects include the Volunteer Income Tax Assistance (VITA) program and a veterans oral history project. Other planned service activities include a community engagement conference, a service learning leadership program, and a campus-wide service celebration.

*Project Co-Directors and Proposal Writers: Professor Betty Habershon and Dr. H. R. Poole
Funded by: The Corporation for National and Community Service through the American Association of Community Colleges*

**Collaborative Workshop for Writing the Elementary Reading Courses**
This workshop was supported through the Maryland State Department of Education (MSDE). MSDE mandated total revisions of the four reading courses that must be taken for elementary certification. Dr. Patricia Basili organized this workshop where reading faculty could collaborate on the writing of the syllabi. Eleven community colleges and five four year colleges participated in this activity. MSDE allocated $2,000 for this effort.

*Project Coordinator: Dr. Patricia Basili
Funded by the Maryland State Department of Education.*

**Gear Up-College Prep Partners**
The College Prep Partners project serves low-income tenth grade students and their parents at Laurel High School. Prince George's Community College, First Generation College Bound and Laurel High School continue as partners in this program. Activities are intended to (1) increase students' academic achievement and readiness for post-secondary education, (2) increase their understanding and acceptance of greater academic challenges, (3) help students assess their career goals and relate these goals to secondary school academic achievement and post-secondary educational opportunities, and (4) provide students and parents information on college admission requirements and financial aid. The five components of the project are: a mentoring program during the academic year using college students as mentors; individual career advisement program; a parent education and support program during the academic year; success newsletters; and a summer enrichment program.

*Project Director and Proposal Writer: Dr. Margaret Taibi.
Funded by the Maryland Higher Education Commission.*

**Gear Up-College Prep Partners – Moving Up**
The College Prep Partners project serves low-income eleventh grade students and their parents at Laurel High School. Prince George's Community College, First Generation College Bound and Laurel High School continue as partners in this program. Activities are intended to (1) increase students' academic achievement and readiness for post-secondary education, (2) increase their understanding and acceptance of greater academic challenges, (3) help students assess their career goals and relate these goals to secondary school academic achievement and post-secondary educational opportunities, and (4) provide students and parents information on college admission requirements and financial aid. The five components of the project are: a mentoring program during the academic year using college students as mentors; individual career advisement program; a parent education and support program during the academic year; success newsletters; and a summer enrichment program.

*Project Director and Proposal Writer: Dr. Margaret Taibi.
Funded by the Maryland Higher Education Commission.*

**Gear Up-College Prep Partners – Senior Year**
This grant is a follow-up of the past two Gear-Up projects. It will serve low-income students now in the twelfth grade and their parents at Laurel High School. As for the three previous years, Prince George's Community College, First Generation College Bound and Laurel High School continue as partners in this program. Activities are intended to (1) increase students' academic achievement and readiness for post-secondary education, (2) increase their understanding and acceptance of greater academic challenges, (3) help students assess their career goals and relate these goals to secondary school academic achievement and post-secondary educational opportunities, and (4) provide students and parents information on college admission requirements and financial aid. The five components of the project are: a
mentoring program during the academic year using college students as mentors; individual career advisement program; a parent education and support program during the academic year; success newsletters; and a summer enrichment program.

*Project Director and Proposal Writer: Dr. Margaret Taibi.*

*Funded by the Maryland Higher Education Commission.*

**Maryland Articulation Partnership for Teachers (MAPT)**

This grant, which is in a no-cost extension year (Year 4), supports the development and implementation of science and mathematics courses for pre-service teachers that conform to the NCATE and Science and Mathematics Education Standards at community colleges across the state of Maryland. Six mentors, three from two year and three from four year colleges, assisted Community College faculty with curriculum writing during the spring and fall semesters. Syllabi and course materials of model courses from Prince George’s Community College and the Maryland Collaborative for Teacher Preparation were available for use. The grant also assisted community colleges to form collaborations with their local Future Educators Clubs and to carry out activities that assist in recruitment of students for their newly developed teacher education programs. Prince George’s Community College invited middle school and high school students to the campus for hands-on experiences in science and math and talks about our education program.

*Principal Investigator and Proposal Writer: Dr. Patricia Basili.*

*Funded by the National Science Foundation.*

**Project LINC: Learning in Communities: 2+2 Program**

This is a Title II Collaborative Grant with University of Maryland. Prince George's Community College is teamed with Towson University in this five year project that aims to increase the number of qualified science and mathematics teachers in Maryland. The PGCC/Towson 2+2 Program allows students who complete the Associate of Arts degree in Teaching (A.A.T.) to complete their Bachelor’s degree with Towson University while taking classes at nearby centers. Towson faculty and PGCC faculty conduct the course-work. The opportunity to graduate from Towson as a certified teacher without having to travel to Baltimore for classes has proven to be a powerful recruitment tool for the PGCC Department of Education. Project LINC has also helped in the completion of the A.A.T. degree by funding the development of two courses. The grant also provided support for secretarial assistance and for hiring additional faculty. Other partners in the grant include the Prince George’s County Public Schools, the University of Maryland College Park, and Bowie State University.

*Project Director: Dr. Patricia Basili.*

*Funded by the U.S. Department of Education.*

**Summer Science Institutes 2004, 2005**

Five two-week institutes provided hands-on instruction in the basic concepts of life science, earth and space science, physics, chemistry, and environmental science. Selected topics support the elementary science curriculum each summer. The nature of science, careful observation and measurement, data display, hypothesis testing, and drawing conclusions from evidence are central parts of institute activities. Teachers prepare practice mini-lessons, become aware of common misconceptions, and utilize the Internet to access resources and are better prepared to meet core learning goals. Ninety-six Prince George’s County teachers attended the seventeenth offering of the institutes. Faculty teachers were: Dr. Christine Barrow, Dr. Barbara Gage, Professor Lisa Maranto, Professor Tereza Marks, Professor Allison Miner, Dr. Joseph Roberts, Dr. Scott Sinex, Dr. Peter Panyon, and Professor Thomas Wysocki. The 2005 institutes will feature a special physics institute for high school teachers who teach the new 9th Grade Conceptual Physics course.

*Project Director and Proposal Writer: Dr. Patricia Basili.*

*Funded by the Maryland Higher Education Commission Eisenhower Project.*

Prince George’s County Public Schools funded the teacher stipends.

**Tech Prep Base and Incentive Grants**

These grants are transition programs that introduce high school students to specialized
careers and provide an opportunity to earn college credit at Prince George's Community College following completion of a series of high school Tech Prep classes. FY2004 funds covered new program development in Auto Tech and Practical Nursing; Project Lead the Way incentive programs at Flowers and Northwestern high schools; and Cisco and National Tech Prep Professional Development. FY 2005 funds were for new program development planning and administration; Professional Development; new Tech Prep program development at Oxon Hill High School; and Project Lead the Way enhancement programs at Flowers and Northwestern high schools.

Project Director and Proposal Writer: Dr. Rose Mary Swartwood
Funded by Maryland State Department of Education

Student Centered

Alcohol, Tobacco and Drug Prevention (ATOD)-Bowie State University Mini-Grant
Funds from this grant will be used to maintain a resource center where students can receive information on alcohol, tobacco and drug use and abuse. Information will be provided through group sessions, working with professors of health education and the social sciences to provide outreach and education to students. Additionally, information will be available in the center in the form of a reference library, brochures, posters, videos, displays and interactive CD-ROMs allowing students to gain information through self-guided use of technology.

Project Director: Dr. Saundra Lynch Ervin.
Funded by the Maryland Alcohol and Drug Abuse Administration through Bowie State University.
Proposal Writers: Dr. Saundra Lynch Ervin and Ms. Beth Adkins.

Analyzing Evidence: Identification and Instrumentation
This grant provides for the development of real world, active-learning, open- and guided-inquiry, problem-based crime scene modules with laboratory experiences which will be integrated into a variety of credit courses for undergraduate forensic science students and into a summer program for talented high school students. The grant also provides for the development of an Analytical Forensic Chemistry Identification and Instrumentation course for forensic Associate of Science (A.S.) students and the acquisition of a mobile Payton Forensic Science Workstation with Luma-lite and accessories to be used in the laboratory exercises and the new forensic chemistry course in order to better prepare students for jobs in the growing and increasingly technology-dependent field of forensic science.

Project Director: Professor Ray Harris.
Funded by the National Science Foundation.
Proposal Writer: Dr. Marilyn Pugh.

BIO MAP Access Program
A program designed to assist disadvantaged students in achieving personal, academic and career goals in the biomedically-related sciences. In partnership with Howard Community College, Montgomery College Rockville, Montgomery College Takoma Park, and the University of Maryland College Park, students have an opportunity to work with faculty mentors in research laboratories at the University of Maryland. BIO MAP students will also enroll in one college class and participate in a professional development seminar during the summer. We currently have four BIO MAP students interning at University of Maryland College Park.

Project Director: Dr. Lloyd McAtee.
Funded by the University of Maryland with support from the National Institutes of Health.

College and Career Transitions Initiative (CCTI)
This project seeks to increase the number of well-educated law enforcement officers for the local community by uniting existing curricular programs into a cohesive and comprehensive pathway to provide students with career transitions from high school criminal justice academies to the college’s criminal justice program and Criminal Justice Institute, then to a Bachelor’s program or into the job market—one with high demand in this area and with wages higher than the mean in the local job market. The educational experience is enriched with
service-learning opportunities and alliances and strengthened by an emphasis on building basic skills while students are still in high school so they do not have to take developmental course when they enter Prince George’s Community College.

Project Director: Professor Donna Gaughan; Co-Project Director: Major Larry Shanks. Funded by the League for Innovation in the Community College/U.S. Department of Education, Office of Vocational and Adult Education. Proposal Writers: Dr. Marilyn Pugh and Dr. Ellen Rossman.

Computer Science, Engineering and Mathematics Scholarships Program (CSEMS)
The grant funds scholarships for students majoring in engineering, engineering technology, computer science, computer information systems, and mathematics. Students are chosen based on financial need, grade point average, and faculty recommendations. Students can receive up to $3125 per year ($1562.50 per semester). Each awardee is assigned a mentor who helps the student complete the grant requirements that include work site visits and job shadowing related to the student's program of study.

Project Director: Professor June Fordham. Funded by the National Science Foundation. Proposal Writer: Dr. Deborah Zankofski.

Developing Minority Biomedical Research Talent in Psychology
The purpose of this grant is to increase the number of students of color pursuing research careers in psychology. Through a multi-institutional regional center, programs and activities are planned and coordinated to achieve this goal. The multi-institutional collaborative partners for the eastern region are the University of Maryland at College Park, Morgan State University and Prince George’s Community College. A major component of this collaborative partnership is a yearlong laboratory-based research experience that exposes students to biomedical research. Student participants engage in ongoing research projects and create new research projects that culminate into professional presentations and publications. Student participants receive mentoring that includes preparation for graduate education. Prince George’s Community College sponsors an annual research conference to jumpstart research careers for students enrolled in high school and in community colleges. This conference is referred to as the Science, Technology and Research Training conference (START) and is held during the spring semester of each academic year. Local high school and college students are invited to participate in this meeting. This grant is in its third funding cycle and a new strategic plan is currently being implemented. Since 1997, Prince George’s Community College has received more than $120,000 to coordinate a series of lectures, seminars and conferences to support initiatives related to this grant.

Project Director: Dr. Robin Hailstorks Funded by the American Psychological Association, National Institute on General Medical Sciences Grant

Developmental Math Computerized Classroom
A grant from the Phillip Graham Fund as well as funds provided by a shared Minority Science and Engineering Program (MSEIP) grant with Clark Atlanta University will help prepare three classrooms for use as computer classrooms for developmental mathematics. The grants will help provide instructor workstations with overhead projectors, screens and white boards, as well as student workstations. The classrooms will be used for the self-paced computer-based implementation of DVM 005, which is already being used by several sections. Computer sections of DVM 003 and DVM 007 will also use the classrooms.

Project Director: Professor Roxann King. Funded by the Phillip Graham Fund and MSEIP Proposal Writer: Dr. Marilyn Pugh

Equipment and Emerging Technology Grant Program
This grant enabled equipment to be purchased for the new Anatomy and Physiology Laboratory at the Laurel College Center. (The Laurel College Center is a site partnered by Prince George's Community College and Howard Community College under a Memorandum of Understanding.) The two-
semester interactive Anatomy and Physiology Lab experience will provide students with the pedagogical and technological skills necessary to function successfully in subsequent nursing and allied health courses; prepare them for their clinical experiences; assist with observational data, analysis and assessments; support problem-solving and decision-making; and enrich the student’s professional performance in the health care field. The Anatomy and Physiology courses are required for entry into both the nursing and allied health career fields. The lab equipment purchased through the grant included a data projection system, an instructor’s computer station, student computers, a microscope, an electrocardiograph, and 3-dimensional torsos.  

Project Directors: Professors Louis Renaud, Prince George’s Community College and Daniel Friedman, Howard Community College.  
Funded by the Maryland Association of Community College  
Proposal Writers: Dr. Margaret Mohler, Howard Community College, and Dr. Marilyn Pugh, Prince George’s Community College

Equipment and Emerging Technology Grant Program  
This grant funded the purchase of a Birthing and Newborn Simulator for Prince George's Community College. This high technology manikin simulates the birthing process with various computer scenarios for fetal and maternal risk factors and associated clinical distress for both the mother and the newborn. The manikin is housed in the nursing laboratory and will be used for the Maternal Health courses in the nursing curriculum.  
Project Director and Proposal Writer: Professor Marie York  
Funded by the Maryland Association of Community Colleges

Equipment to Implement the PGCC/HCC Wireless LAN Curriculum  
This proposal is in response to the MACC TEC Wireless Curriculum Equipment Grants Program RFP. In 2001, the PGCC Department of Engineering Technology partnered with Howard Community College (HCC) to develop a "Wireless Curriculum.” This curriculum is being implemented by community colleges throughout the state of Maryland. PGCC was responsible for development of the wireless local area network (WLAN) segment. In the spring of 2002, PGCC developed the course ENT 219 Wireless Local Area Networks (WLANs) to implement its segment of the "Wireless Curriculum" at PGCC. The intent of this proposal is to obtain a portion of the necessary lab equipment (in support of ENT 219) using MACC funds. The proposal matches PGCC funding up to $10,000.  
Funded by the MAITI Maryland Association of Community Colleges

Integrating Information Technology into Existing and Emerging Curricula in Nursing and Allied Health  
Funding from this grant was used to purchase the Noell Maternal and Neonatal Birthing Simulator with Pedi Blue Neonate Simulator and associated laptop computer. The Birthing Simulator is an interactive female with one birthing baby and one interactive neonate. Following delivery (birth), the interactive neonate changes color when the airway is clear and ventilation is established by the student. Learning stations include obstetric management, as well as advanced life support for the “mother” and the baby. It also includes an IV arm for medications, multiple maternal, fetal, and neonatal heart sounds. Virtual monitoring includes heart rate, blood pressure, oxygen saturation, and EKG. This interactive manikin is a computer-controlled birthing system that can accomplish deliveries in five minutes to 16 hours, interpret fetal ultrasound videos, and apply use of the ultrasound wand to monitor fetal condition. The instructor can select multiple scenarios to be assessed by the student. Two additional laptops were also purchased for use with the college’s SimMan.  
Project Director and Proposal Writer: Professor Marie York  
Funded by Maryland Association of Community Colleges

Minority Science and Engineering Improvement Program (MSEIP)  
This project’s goal is to increase the flow of students into science, mathematics, engineering, and technology programs by increasing the
number of students who enroll and succeed in pre-calculus and calculus. The program 1) upgrades and increases the availability of computers, networks, and software for mathematics faculty and students, in offices, classrooms, and laboratories; 2) provides technology training for mathematics faculty and tutors; 3) increases Internet and CD-ROM access to mathematics software for students who have access to an off-campus computer; and 4) redesigns algebra, geometry, and trigonometry courses and learning materials that prepare students for pre-calculus and calculus. The goal is to see a 50% enrollment increase in pre-calculus and calculus by the end of the three-year project.

Principal Investigator and Proposal Writer: Dr. Eldon Baldwin.
Other faculty involve: Dr. Charles Hansborough, Professor Roxann King, and Dr. George Perkins.
Funded by the U.S. Department of Education.

Minority Science and Engineering Improvement Program (MSEIP)
The most significant objective of this project is to construct and staff a Mathematics Learning Center (Π-Shop). The project also expands and enhances the use of the Interactive Instructional Delivery System (IIDS) and other computer software to support individualized algebra skill-building, problem-solving, and assessment. A third component of the project is expanding and enhancing the incorporation of cooperative learning activities into the intermediate algebra, pre-calculus, and calculus instructional programs, based upon the Peer-Led Team Learning Workshop Model. A final purpose of the project is to expand and enhance integration of confidence building, study skills, and time management activities into mathematics instruction for new college students.

Principal Investigator and Proposal Writer: Dr. Eldon Baldwin.
Funded by the U.S. Department of Education.

Minority Science and Engineering Improvement Project (MSEIP)
This grant is intended to pay for 1) equipping and wiring a new electronic classroom in Bladen 205 for use of developmental mathematics; 2) helping complete the Bladen 207 electronic classroom; 3) two additional instructor workstations for use in traditional developmental mathematics classrooms; and 4) stipends to support instructional technology training for credit and developmental mathematics faculty and staff.

Principal Investigator and Proposal Writer: Dr. Eldon Baldwin. Assistant Project Director: Professor Brenda Teal
Funded by the U.S. Department of Education

National Center for Aerospace Technical Education-SpaceTEC
The mission of the center is to create and implement an industry-driven, government-endorsed, educational process that sustains a globally competitive aerospace technician workforce. The center will develop a national aerospace technician education and training program that includes both certificate and associate degree options, disseminate the curriculum nationally, and develop smooth articulation with local high schools and neighboring four-year institutions. The national center is housed at Brevard Community College, FL. Prince George’s Community College serves as a partner.

Co-Principal Investigator: Dr. Patricia Cunniff.
Funded by the National Science Foundation.

Carl Perkins, Title 1C Grant Funding
Under the Perkins Act, federal funds are made available to help provide vocational-technical education programs and services. Uses of funds include equipment, teaching and learning materials, curriculum development or modification, faculty professional development, career counseling and guidance activities, and supplemental services for special populations.

The grant funding for FY04 and FY05 provided support for software upgrades for accounting, computer information systems (CIS), engineering technology and health programs; faculty training for online course development; faculty training in Visual Basic and web development for computer information systems; upgrades to the technology infrastructure of the new Visual Communication lab; upgrades of computer equipment; hands-on tools for the theatre and entertainment technology program;
smart carts with computers and digital projectors for CIS, engineering technology, visual communications, and nursing and allied health; specialized equipment for CIS, engineering technology, forensic science, nursing and allied health programs; educational materials for early childhood education; computer technician and tutoring support; a peer-to-peer tutoring program for accounting students with purchase of laptop computers and a security cart; and vocational Support Services.

Project Director: Professor June Fordham
Funded by the U.S. Department of Education through Maryland State Department of Education
Proposal team: Professor June Fordham, Mr. Oliver Hansen, Dr. Margaret Taibi, Ms. Denise Fitzgerald, and Dr. Marilyn Pugh.

Regular Upward Bound
This grant will provide 55 students per year (275 over a five-year period) with educational and cultural opportunities to help them overcome the academic and motivational barriers that inhibit their academic success. The goal of the program is to increase the number of these pre-identified youth who complete high school and enroll in post-secondary education programs. The program will provide academic instruction, as well as career and financial counseling to students in grades 9 through 12 and will encourage them to graduate from high school and continue on to the college or university of their choice. The Upward Bound program will also serve high-risk students, encouraging them to complete their education. The program will identify, recruit, and serve individuals between the ages of thirteen (13) and nineteen (19). In addition, eligible veterans may be served regardless of their age. Two-thirds of the participants in the program will be low-income and potential first generation college students.

Project Director: Dr. Kathy Hopkins.
Funded by the U.S. Department of Education, Office of Postsecondary Education Programs.

A SySTEM’s Approach to STEM Education
A SySTEMs Approach to STEM Education provides funding for the STEM Collegian Center as the focal point for increasing STEM enrollments, majors, certificates, associate’s degrees and transfer rates to baccalaureate degree programs in science, technology, engineering, and mathematics. The project uses three well-documented educational methodologies to help students succeed in STEM fields: (1) an interdisciplinary approach to improve the depth and breadth of learning in interrelated STEM disciplines, (2) a mentored learning community on campus, and (3) the integration of research and education to promote student understanding and excitement in STEM disciplines. Center students participate in Laboratory (a virtual 3-bed intensive care unit with an associated control room). Faculty have learned how to write and integrate computerized scenarios for student learning and testing. The SimMan manikins are state-of-the-art technology equipped to simulate virtual patient responses during student procedures. (heart rate, cardiac rhythms, breathing, distress, oxygenation, etc.)

Project Director and Proposal Writer: Professor Marie York
Funded by the Maryland Association of Community Colleges

Student Support Services (SSS)/TRIO
This federally funded grant program provides eligible students (low-income, first generation or disabled) with individualized academic and personal support to assist them in the completion of a college degree. Student Support Services/TRIO helps students focus on their educational and career goals; develop effective study habits; strengthen weak areas; and reinforce their talent, potential and motivation. The program offers orientation for new students; tutoring; academic, financial aid and transfer advising; personal, career and academic counseling; learning skills assessment and advising; cultural enrichment activities; and college visits.

Project Director and Proposal Writer: Ms. Debra Greene.
Funded by the U.S. Department of Education.

SimMan Accessories Package
Funding under this grant afforded the opportunity to purchase an additional high technology SimMan Package. The college now has three SimMan manikins. These manikins are housed in the Interdisciplinary Simulation
research and internship opportunities at 4-year institutions and on campus with a faculty mentor and will present their results at an annual conference. The Center also sponsors fieldtrips to locations such as NASA, the NSA Cryptology Museum, and Pautuxant Wildlife Center, to local universities and to firms that hire STEM graduates. Each student will be required to complete a capstone activity, many of which will be team-based. Financial performance awards are available to students on a competitive basis while “Build Your Own Computer Weekends” will foster collegiality. Faculty will also benefit from a variety of professional development activities including visits to local universities on Discipline Days for presentations on the latest theory and research and for laboratory visits and an annual Crossing the Line Conference on interdisciplinary topics in STEM fields.

Principal Investigators: Dr. John Bailey, Dr. Christine Barrow, and Professor Barbara Abdul-Kareem

Funded by the National Science Foundation

Proposal Writer: Dr. Marilyn Pugh
### Partners & Collaborators for Grants Active in FY04 and FY05

#### BIO MAP Access Program
- Howard Community College
- Montgomery College, Rockville
- Montgomery College, Takoma Park
- University of Maryland College Park

#### Bluebird Blues Festival
- Maryland National Capital Parks & Planning

#### College and Career Transitions Initiative
- Laurel City Police Department
- Potomac High School
- Northwestern High School
- Laurel High School

#### CyberWATCH Planning Grant
- CISCO
- CompTIA
- Eleanor Roosevelt High School
- Frederick Community College
- GW Solutions
- Howard Community College
- Lord Fairfax Community College
- Montgomery College
- Northern Virginia Community College
- University of Maryland College Park
- Virginia Community College System
  - Institute for Excellence for Information Technology

#### Equipment and Emerging Technology:
- Laurel College Center
  - Howard Community College

#### Focus Groups Grants: Cybersecurity
- National Security Agency
- NASA Goddard Space Flight Center

#### Gear-Up – College Prep Partners
- First Generation College Bound
  - Laurel High School

#### Gear-Up – Prep Partners Moving Up
- First Generation College Bound
  - Laurel High School

#### Gear-Up – College Prep Partners Senior Year
- First Generation College Bound
  - Laurel High School

#### Leadership Institute for South African Secondary Education
- Anne Arundel County Board of Education
- Capitol College
- Charles County Board of Education
- Charles Herbert Flowers High School
- College of Southern Maryland
- DeMatha Catholic High School
- Eleanor Roosevelt High School
- Garrett College
- Garrett County Board of Education
- Maryland State Department of Education
- Montgomery Blair High School
- Oxon Hill High School
- P. G. County Workforce Services Corp.
- University of Maryland K-16 Center
- WorldWise Services, Inc.

#### Maryland Articulation Partnership for Teachers
- Maryland Community Colleges
- Montgomery College
- Frederick Community College
- Howard Community College
- Community College of Baltimore County
- Baltimore City Community College
- Carroll Community College
- Allegany Community College
- Hagerstown Community College

#### Metropolitan Ebony Theatre
- Ebenezer A.M.E. Church

#### National Center for Aerospace Technical Education—SpaceTEC
- Brevard Community College

#### Potomac Cluster for Academic Achievement
- University of Maryland College Park
- University of Maryland University College

#### Project LINC
- University System of Maryland
- University of Maryland College Park
- Bowie State University
- Towson University
- Prince George’s County Public Schools
- Oracle

#### Relate, Create, Donate
- National University of Rwanda
Awards for Programs and Personnel Supported by CARD

2005
WCET Outstanding Work Award
For Quality Matters by the Western Cooperative for Educational Telecommunication

2005
Best Distance Learning Program
For Quality Matters by the Maryland Distance Learning Association

2004
Outstanding Postsecondary Change Agent
To Raymond L. Harris for leadership for innovative change in state approved postsecondary career and technology education programs (Forensic Science) by Maryland State Department of Education.

2000
Outstanding Multicultural Program Award
For the Bluebird Blues Festival by the National Association of Campus Activities

1999
Gold Medallion of Excellence Award
For the design of the 7th Annual Bluebird Blues Festival logo, to the Prince George's Community College Marketing and Public Relations Office by the National Council for Marketing and Public Relations.

1998
The Maryland Association for Higher Education, Distinguished Program Award – Open Category
To the Prince George's Community College Humanities Resource Center for the Humanities Resource Center.

1998
Faculty Recognition Award
To the Academic Resource Development for Excellence and Innovation in Teaching, Learning, and Leadership by the Consortium for Community College Development.

1997
The Eisenberg Prize for Excellence in the Humanities
To Lyle E. Linville by the Maryland Humanities Council.

1997
Theodore M. Hesburgh National Certificate of Excellence Award for Faculty Development to Enhance Undergraduate Teaching and Learning
To the Prince George's Community College Science and Technology Resource Center by TIAA-CREF.

1993
Distinguished Program Award
For The Blues Project to Isa Engleberg and Lyle Linville by the Maryland Association for Higher Education.
## Proposals Funded, Pending, or Declined in Fiscal Year 2004

<table>
<thead>
<tr>
<th>Proposal Title/Funding Agency</th>
<th>Project Director(s)</th>
<th>Grant Requested</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metropolitan Ebony Theatre/MSAC</td>
<td>C. Collins</td>
<td>$ 4,591</td>
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<tr>
<td>Potomac Cluster Consortium for Academic Achievement/MHEC</td>
<td>P. Basili</td>
<td>$ 89,948</td>
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<td>College &amp; Career Transitions Initiative/League for Innovation</td>
<td>D. Gaughan/L. Shanks</td>
<td>$ 150,000</td>
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<td>GEAR UP College Prep Partners/MHEC</td>
<td>M. Taibi</td>
<td>$ 50,000</td>
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<tr>
<td>11th Annual Bluebird Blues Festival/MSAC</td>
<td>J. Boyar</td>
<td>$ 4,573</td>
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<td>Metropolitan Ebony Theatre/Washington Post</td>
<td>C. Collins</td>
<td>$ 6,000</td>
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<td>Carl D. Perkins Grant (Post Secondary)/USDOE Title IV</td>
<td>C. Hansborough</td>
<td>$ 655,666</td>
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<td>CRF Tobacco Use Prevention &amp; Cessation Program/PGCCD</td>
<td>P. Thomas/M. York</td>
<td>$ 30,000</td>
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<tr>
<td>A SySTEM’s Approach to STEM Education/NSF</td>
<td>J. Bailey/C. Gossage</td>
<td>$ 999,574</td>
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<tr>
<td>Mathematics Learning Center/MSEIP – USDOE</td>
<td>E. Baldwin</td>
<td>$ 299,737</td>
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<tr>
<td>Quality Matters: Inter-Institutional Quality Assurance in On-Line Learning/FIPSE</td>
<td>M. Wells</td>
<td>$ 509,177</td>
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<td>Developmental Math Computer Classroom/Clark Atlanta MSEIP</td>
<td>R. King</td>
<td>$ 9,000</td>
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<td>BIO MAP/UMCP</td>
<td>L. McAtee</td>
<td>$ 969</td>
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<tr>
<td>Infusion of Computer Simulation Technology into Health Curricula (revised)/MACC</td>
<td>C. Dover</td>
<td>$ 30,000</td>
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<td>Preparing Tomorrow’s Science &amp; Math Teachers at Comm. Coll.: Round II/Phi Theta Kappa</td>
<td>P. Cunniff</td>
<td>$ 14,610</td>
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<td>Annual Bluebird Blues Festival (FY’05)/MSAC</td>
<td>J. Boyar</td>
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<td>Metropolitan Ebony Theatre/MSAC</td>
<td>C. Collins</td>
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<td>CyberWATCH: Cybersecurity Washington Area Technician &amp; Consortium Headquarters</td>
<td>J. Rossmeier</td>
<td>$ 925,107</td>
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<td>PGCC/HCC Wireless LAN Curriculum/MACC</td>
<td>W. Lauffer/C. Hendrickson</td>
<td>$ 9,884</td>
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<td>Horizons Service Learning Mentee Colleges/AACC</td>
<td>B. Habershon</td>
<td>$ 12,000</td>
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<td>Focus Group Grant: Cybersecurity/MACC</td>
<td>E. Grosse</td>
<td>$ 2,500</td>
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<td>History of Prince George’s County Institute/MHC</td>
<td>J. Citro/C. Hoffman</td>
<td>$ 9,541</td>
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<td>Developmental Math Electronic Classroom/MSEIP – USDOE</td>
<td>E. Baldwin</td>
<td>$ 299,623</td>
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<td>Univ. of Rwanda &amp; UMD Partnership/UMCP</td>
<td>M.H. Spear</td>
<td>$ 7,219</td>
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<td>Integrating Information Technology into Curricula in Nursing &amp; Allied Health/MACC</td>
<td>M. York</td>
<td>$ 20,000</td>
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<td>Building a College Campus Tobacco Control Coalition/DHMH</td>
<td>B. Adkins</td>
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<td>12th Annual Bluebird Blues Festival/PGAC</td>
<td>J. Boyar</td>
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<td>A SySTEM’s Approach to STEM Education/NSF</td>
<td>J. Bailey/C. Barrow</td>
<td>$ 988,253</td>
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<td>Equipment and Emerging Technology: Laurel College Center/MACC</td>
<td>L. Renaud</td>
<td>$ 41,000</td>
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<td>College Prep Partners: Moving Up/MHEC</td>
<td>M. Taibi</td>
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<td>Carl D. Perkins/MSDE-USDOE</td>
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### Total of Proposals submitted in FY’04

**$3,620,038**

### Total Amount Funded in FY’04

**$2,261,612**

*Status of proposals as of 7/1/04: ¹Proposals Funded ²Proposals Pending ³Proposals declined*
Proposals Funded, Pending, or Declined in Fiscal Year 2005

<table>
<thead>
<tr>
<th>Proposal Title/Funding Agency</th>
<th>Project Director(s)</th>
<th>Grant Requested</th>
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<tr>
<td>Annual Bluebird Blues Festival (FY’05)/MSAC</td>
<td>J. Boyar</td>
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<td>Metropolitan Ebony Theatre/MSAC</td>
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<td>Integrating Information Technology into Curricula in Nursing &amp; Allied Health/MACC</td>
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<td>12th Annual Bluebird Blues Festival/PGAC</td>
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<td>A SYSTEM’s Approach to STEM Education/NSF</td>
<td>J. Bailey/C. Barrow</td>
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<td>SimMan and Accessories/MACC</td>
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<td>Community Colleges Broadening Horizons Thru Service Learning</td>
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<tr>
<td>(renewal)/AACC</td>
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Status of proposals as of 7/1/05: ¹Proposals Funded  ²Proposals Pending  ³Proposals declined