



Sponsored Research
and Program Activity
At the University of the
District of Columbia:
FY2010

Introduction

Since his appointment as President of the University of the District of Columbia (UDC) in 2008, Dr. Allen L. Sessoms has placed a major emphasis on research, especially in science, technology, engineering, and mathematics (STEM). The Board of Trustees has endorsed Dr. Sessoms' vision for UDC to be a diverse, selective, teaching, research, and service university in the land-grant tradition, serving the people of Washington, DC and the nation. The University's top goals are to become an outstanding institution for undergraduate and graduate education with a global focus; to offer exceptional research-driven graduate and professional programs of importance to the District and the Nation; and to provide an important economic engine for the District of Columbia and the region. To facilitate this new emphasis and drive increases in grant activity, the University re-established the Office of Sponsored Programs.

During FY2010:

- ❖ The University submitted 65 proposals totalling \$43 million to develop research, new educational programs and to expand opportunities for students on campus.
- ❖ Of the proposals, 36 were competitive grant applications, producing an average submission rate of 3 proposals per month. This rate is expected to rise as more faculty become active in pursuing research funding.
- ❖ The University was awarded 21 grants in FY2010 totalling \$10 million.
 - These awards included:
 - 2 new educational programs;
 - 2 major initiatives to help minority students succeed in the research environment; and
 - 1 initiative to develop an innovative undergraduate curriculum in renewable energy.
- ❖ Internal seed grants funded 15 projects for faculty to jumpstart the research process by providing necessary supplies and equipment.

Submitted in FY2010

Faculty and staff submitted 65 grants, contracts, memorandii of understanding, memorandii of agreements, subawards and subcontracts through the Office of Sponsored Programs in FY2010. These submissions do not represent all of the requests for funds from the University to external funding sources (e.g. financial aid and Title III grants are not included). Figure 1 shows the number of submissions and the monthly variation in submissions for FY 2010.

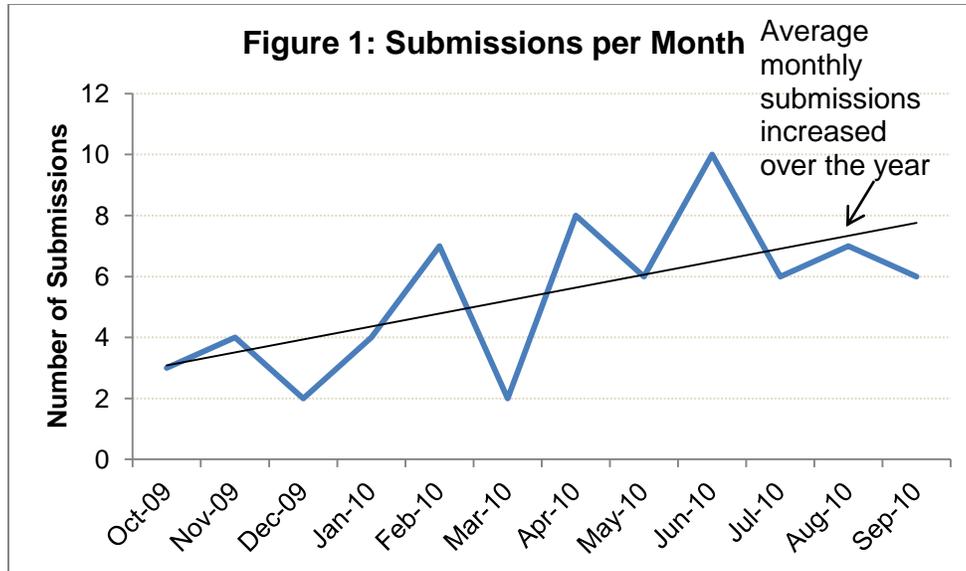


Table 1 presents the submissions by school or college and the key funders of activities at UDC. The College of Arts and Sciences had the highest number of grant submissions and had the highest dollar amount requested in FY2010 compared to other colleges or programs in the University as shown in Table 1. As research and other sponsored activities on campus continue to grow, we anticipate an increase in submissions to continue.

Partnering with the Community

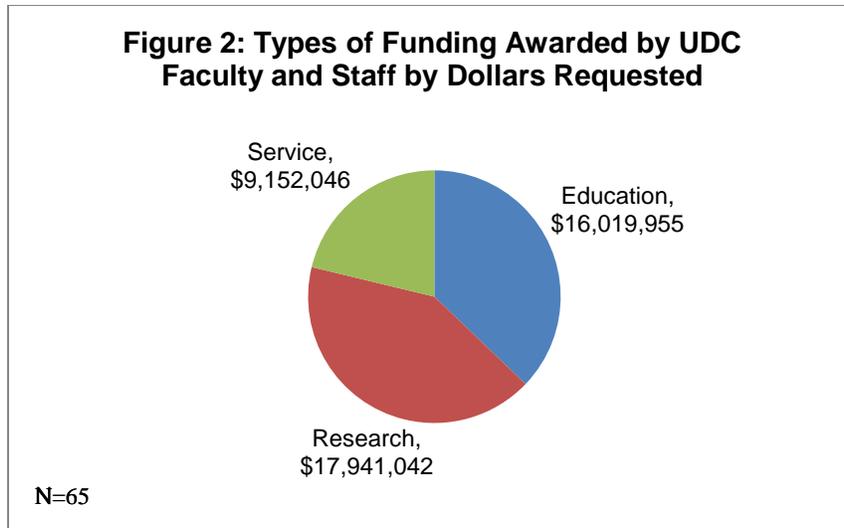
In FY2010, UDC partnered with many local and national universities on research projects as either the primary or the subrecipient institution. In addition to funding, these partnerships also provided opportunities for UDC faculty and students to do research at other universities' facilities.

Table 1: Submissions by School and Sponsor

Submissions by School		
	Number	\$ Requested
Total	65	\$42,817,494
CAS	21	\$16,858,641
SEAS	13	\$9,983,858
GSR	5	\$5,574,023
CAUSES	16	\$3,980,726
Student Affairs	4	\$3,494,492
SBPA	2	\$2,100,000
Law School	3	\$775,753
Campus Services	1	\$50,000
Submissions by Agency		
	Number	\$ Requested
NIH	2	\$9,902,506
NSF	10	\$9,763,761
U.S. Department of Education	7	\$6,729,355
Department of Defense	3	\$5,998,970
D.C. Government	13	\$5,595,744
Other Federal	8	\$1,804,565
USDA	9	\$1,428,702
Other Private	5	\$978,455
USGS	2	\$184,670
HHS	2	\$430,765

Advancing the UDC Mission

The types of funding sought by UDC faculty and staff can be divided into three broad areas: research, education (to develop new academic programs, curricula, instructional materials, or courses), and service (funding for programs that serve the larger DC community). Figure 2 displays a pie chart of proposal submissions by primary purpose. Of course, many of the proposals combine research, teaching, and service.



Nearly 40 percent of the funding requested by UDC faculty and staff was for educational programs. Approximately, 42 percent of the funding requested was to pursue research activities and enhance our research partnerships with other institutions in areas such as cloud computing, urban agriculture and cancer biology. The remaining 25 percent was for service projects. These proposals included a survey to determine seat-belt usage by vehicle occupants driving in the District of Columbia, enhancing the service learning offerings at the University, and summer camps for military families.

Competitive grant submissions are a hallmark of a successful research program. At UDC in FY2010, there were 36 competitive grant proposals submitted, requesting a total of \$36 million dollars. The majority of these competitive grant proposals were to federal agencies as shown in Table 2. The National Science Foundation had the highest number of submissions (7). The three proposals to the Department of Defense were under its HBCU initiative and one proposal was for \$5 million to start a new STEM center of education excellence, supporting defense-related STEM workforce needs.

Table 2: Grant Submissions by Agency

	Number of Submissions	\$ Requested
Total	36	\$35,909,570
National Institutes of Health	2	\$9,902,506
National Science Foundation	7	\$9,372,796
U.S. Department of Education	7	\$6,729,355
Department of Defense	3	\$5,998,970
Other	6	\$2,822,498
USDA	5	\$1,083,445

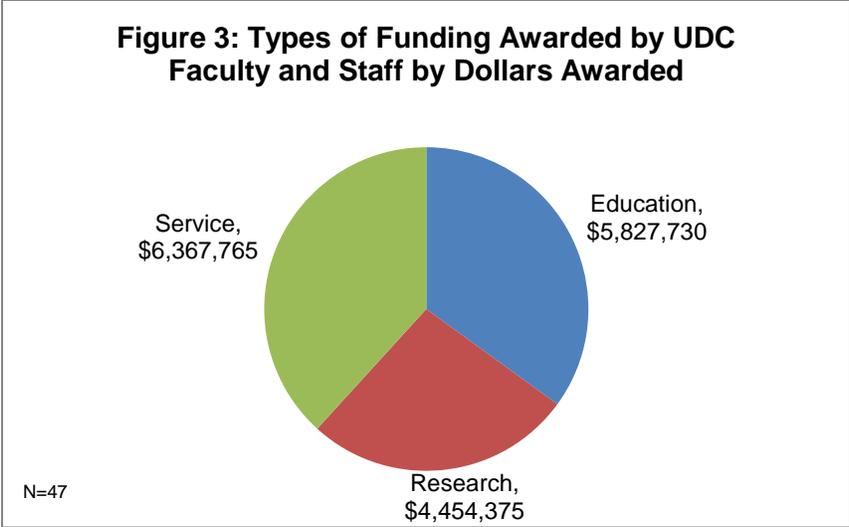
An important vehicle for community outreach is the newly established College of Agriculture, Urban Sustainability and Environmental Sciences (CAUSES), which incorporated the existing USDA-sponsored land-grant activities of the Agricultural Experiment Station and the Cooperative Extension Service. This exciting new college houses the Water Resources Research Institute which is developing an EPA certifiable laboratory for research in water quality both in D.C. and in the Greater Chesapeake Bay area. CAUSES also houses the Center for Nutrition, Diet and Health that takes the science of healthy eating out to the community and sponsors the university-based Farmer's Market.

Awarded in FY2010

UDC received 47 awards in FY2010. Of these awards, the majority were grant awards. It worth noting, however that some of the awards were from proposals submitted before FY2010. The breakdown of these awards by school and funding agency are shown in Table 3. When analyzed by college, CAS had the most awards, including the largest grant awarded to an institutional proposal: the MARC U*STAR program, awarded over \$2.8 million from the National Institutes of Health (see pink highlight box). When examined by type of funding, the largest percentage of awards in FY2010 went to service programs followed by educational programs. These percentages are in alignment with our mission as a land-grant university in service to the community (Figure 3). Note that these funding amounts include the entire multi-year duration of each award, not merely the amount allocated to the University for the first phase. Subsequent phases are not guaranteed, and they often depend on progress, reporting, and compliance with terms and conditions.

Table 3: Awards by School and Sponsor

Awards by School		
	Number	\$ Awarded
Total	47	\$16,649,870
CAS	19	\$8,447,991
CAUSES	14	\$3,228,257
SBPA	2	\$2,100,000
SEAS	7	\$944,437
Law School	3	\$775,753
Office of the President	1	\$753,629
CARUP	1	\$399,803
Awards by Agency		
	Number	\$ Awarded
D.C. Government	14	\$5,623,665
NIH	1	\$2,880,739
U.S. Department of Education	4	\$2,547,663
Other Federal	7	\$1,678,163
NSF	6	\$1,481,028
USDA	9	\$1,453,942
Other Private	4	\$800,000
USGS	2	\$184,670



AWARD HIGHLIGHT: MARC U*STAR

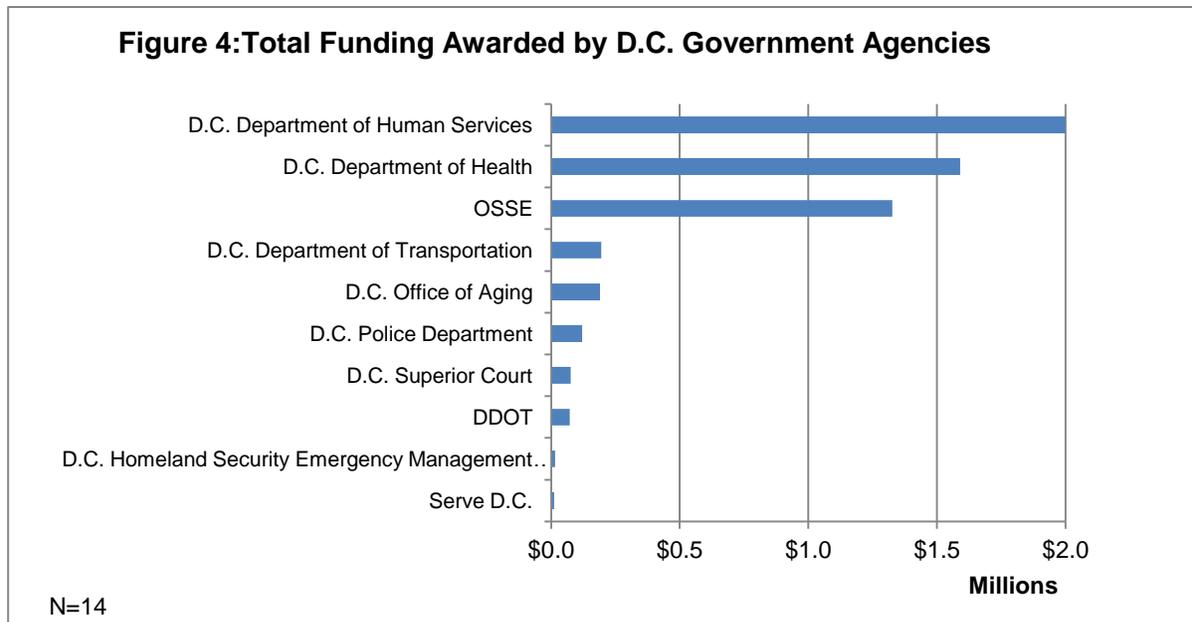
MARC U*STAR – In June 2010, the University was awarded \$2.8 million over 5 years from the National Institutes of Health to establish the MARC (Minority Access to Research Careers) U*STAR Honors Program for biology, chemistry, and psychology students, who have an interest in entering biomedical and behavioral science research careers (PI: Dr. Freddie Dixon). The goal of the Program is to promote initiatives, strategies and activities and to strengthen the undergraduate curriculum to increase the number of minority students entering graduate programs to obtain Ph.D.s or M.D./Ph.D.s and enter careers in biomedical and behavioral science research.

Each year, for the 5-year duration, students will apply and 5 of them will be selected to participate as MARC U*STAR Scholars. These students receive tuition, fees and monthly stipends. The 2010 Awardees are Desta Abetew, Loubna Elhelu, Habib Kedir and Felicia Swafford.

Serving The District

The District of Columbia is the largest single source of program sponsorship at the University. Nearly \$5.7 million dollars came to the University through Intradistrict Agreements facilitated by the Office of Sponsored Programs (Figure 4). The D.C. Department of Human Services has funded PATHS for 12 years (see blue highlight box). The D.C. Department of Health funds the SNAP-ED program in CAUSES (\$1.5 million annually). This program educates food-stamp recipients about making healthy food choices. Additionally, SERVE DC, the Mayor’s Office on Volunteerism, funds the

UDC Service Learning program (\$125,000 annually) through which students receive academic credit to work with faculty on volunteer projects. This important grant increases students' sense of social responsibility and their civic skills through service learning in the community.



AWARD HIGHLIGHT: PATHS

PATHS -- Paving Access Trails for Higher Security (PATHS) was designed in 1997 and implemented in 1998 to provide job skills training for District of Columbia residents receiving Temporary Assistance for Needy Families (TANF). Funded by the D.C. Department of Human Services and now in its twelfth year, the PATHS partnership led by Dr. Antonia Nowell between the University of the District of Columbia, School of Business and Public Administration and D.C. Department of Health Income Maintenance Administration (DHS/IMA) has been strengthened over time to benefit TANF customers and the community. In FY10, PATHS provided various types of services for just over 1,100 TANF clients.

PATHS consists of job readiness and employment skills training and provides TANF customers with essential tools needed to become engaged in the workforce and initiate their journey to self sufficiency. These services include: Career assessment and counseling, basic math and reading assessment, job readiness training, job skill and related training, life skills, financial literacy and an array of other support services such as, access to clothing for work, professional development, educational counseling for those seeking a high school diploma or to attend college (enrolled in UDC).

Competitive Grants Awarded in 2010

There were 21 grants awarded in FY2010 for a total of nearly \$10 million. The National Institutes of Health and the U.S. Department of Education were the largest grant funders at UDC with each awarding over \$2.5 million in new funding, excluding our Title III appropriation. This funding included awards for three new programs at UDC:

- The development of a rehabilitation counseling master's program in the Department of Psychology and Counseling (PI: Dr. Lisa Moon).
- A program developed in conjunction with the Community College of the District of Columbia to develop training for paraprofessionals who work with children aged 0 to 5 with disabilities (PI: Dr. Arlene King-Berry)
- MARC U*STAR research training program in STEM to prepare UDC graduates for PhD or MD/PhD programs to enter research careers in biomedical and behavioral sciences (PI: Dr. Freddie Dixon)

Figure 5 shows the sponsoring agency for the 21 competitive grants awarded during FY2010. The National Institutes of Health was the largest funder with support for a single grant, the MARC U*Star grant, followed by the U.S. Department of Education.

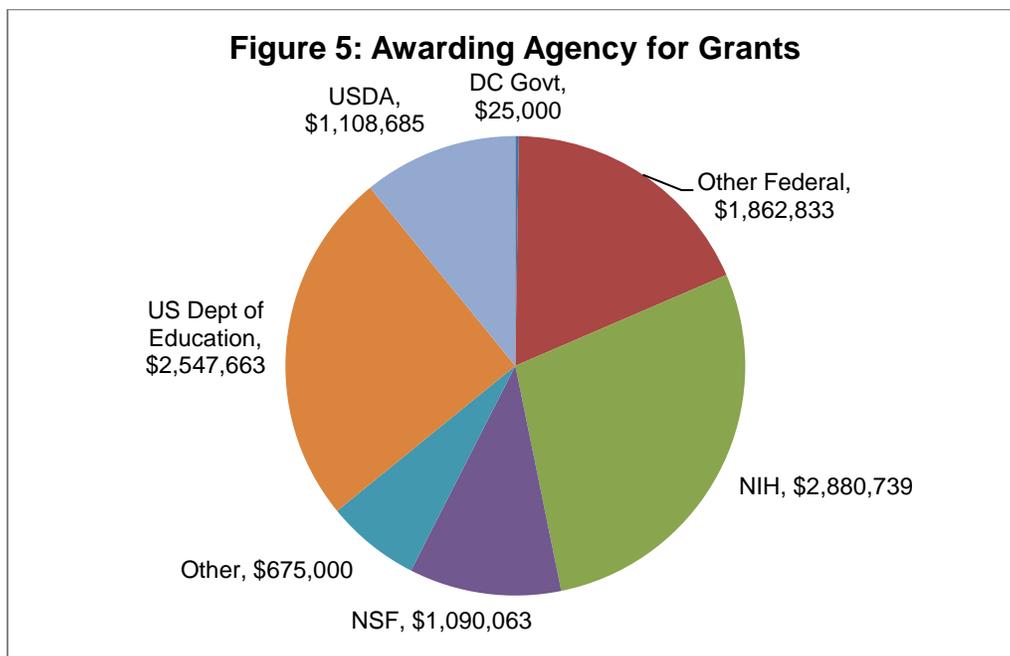


Table 4 shows the top grant recipients in FY2010, each of whom had new project(s) awarded over \$500,000. Most of these PIs had one or more co-PIs, who are very involved in the proposal and the funded project and share the credit.

Table 4: Principal Investigators Awarded Over \$500,000 in FY2010	
Principal Investigators	Total Amount Awarded
Freddie Dixon	\$2,880,739
Lisa Moon	\$996,979
Sylvia Hill	\$709,086
Shelley Broderick	\$700,000
Laurie Blackman Thompson	\$622,548
Arlene King-Berry	\$598,035

AWARD HIGHLIGHT: ARTSI

ARTSI -- The University of the District of Columbia has been an ARTSI (Advancing Robotic Technology for Societal Impact) member since its inception in 2007. The collaboration has grown to involve eighteen other Historically Black Colleges and Universities and nine major research universities. ARTSI at UDC encourages students, especially African Americans, to pursue graduate training and research careers in robotics and computer science. The FY2010 award will allow ARTSI programs to develop additional curricula and outreach activities. At UDC, ARTSI is under the leadership of Professors LaVonne Manning and David Barnett. A new course -- Cognitive Robotics, is now an elective for Computer Science majors. At UDC, "the robotics club" is an active group that sponsors bi-weekly seminars, workshops and contests. At the 2010 ARTSI conference in Hampton, VA, the UDC robotics team won second place in the Hardware/Software Integration event and first place in the Google Gadget Making event.

Appendix A

Submissions by Type and School/College

		Contract	Grant	MOU/MOA	Subaward	Total
CAS	Number	2	12	7	0	21
	\$ Requested	\$363,118	\$15,349,980	\$1,145,543	\$0	\$16,858,641
CAUSES	Number	2	7	5	2	16
	\$ Requested	\$160,041	\$1,923,705	\$1,704,645	\$192,335	\$3,980,726
GSR	Number	1	2	2	0	5
	\$ Requested	\$399,803	\$5,028,500	\$145,720	\$0	\$5,574,023
DAC Law School	Number	0	2	1	0	3
	\$ Requested	\$0	\$700,000	\$75,753	\$0	\$775,753
SBPA	Number	0	0	2	0	2
	\$ Requested	\$0	\$0	\$2,100,000	\$0	\$2,100,000
SEAS	Number	0	8	1	4	13
	\$ Requested	\$0	\$9,362,893	\$195,000	\$425,965	\$9,983,858
Other	Number	0	5	0	0	5
	\$ Requested	\$0	\$3,544,492	\$0	\$0	\$3,544,492
Total	Number	5	36	18	6	65
	\$ Requested	\$922,962	\$35,909,570	\$5,366,661	\$618,300	\$42,817,494

Awards by Type and School/College

		Type of Award				Total
		Contract	Grant	MOU/MOA	Subaward	Total
CAS	Number	1	10	8	0	19
	\$ Awarded	\$190,000	\$7,084,527	\$1,173,464	\$0	\$8,447,991
CAUSES	Number	1	6	5	2	14
	\$ Awarded	\$130,257	\$1,201,020	\$1,704,645	\$192,335	\$3,228,257
GSR	Number	1	0	0	0	1
	\$ Awarded	\$399,803	\$0	\$0	\$0	\$399,803
DAC Law School	Number	0	2	1	0	3
	\$ Awarded	\$0	\$700,000	\$75,753	\$0	\$775,753
SBPA	Number	0	0	2	0	2
	\$ Awarded	\$0	\$0	\$2,100,000	\$0	\$2,100,000
SEAS	Number	0	2	1	4	7
	\$ Awarded	\$0	\$323,472	\$195,000	\$425,965	\$944,437
Other	Number	0	1	0	0	1
	\$ Awarded	\$0	\$753,629	\$0	\$0	\$753,629
Total	Number	3	21	17	6	47
	\$ Awarded	\$720,060	\$10,062,648	\$5,248,862	\$618,300	\$16,649,870

Appendix B – Principal Investigators and Co-Principal Investigators who submitted proposals by College

CAS	CAUSES	CCDC	DAC Law School	GSR	SBPA	SEAS	Other
Abdi Darai	B. Michelle Harris	Connie Spinner	Katherine Broderick	Beverly Hartline	Antonia Nowell	Abiose Adebayo	Agnita Coleman (Student Affairs)
Angelyn Flowers	Clarence Pearson	Eugene Shiro		Chinua Akukwe	Candice Miles	Byunggu Yu	Alex Garrett (Facilities)
Arlene King-Berry	Ivercottis Short	Marilyn Hamilton		Jovita Wells		Esther Ososanya	Janice Borlandoe (Student Affairs)
Carolyn Cousin	James Allen					Inder J. Bhambri	Saundra M. Carter (Student Affairs)
Daniel Soodjinda	Joanne Favors					Kunhee Choi	Serena Butler Johnson (Student Affairs)
Deepak Kumar	Lillie Monroe-Lord					LaVonne Manning	Sislena Ledbetter (Student Affairs)
Doris Johnson							
Eugene Shiro	Rebecca Bankhead					Li Chen	Caroline Charles (Early Childhood Center)
Haliemichael Seyoum	Tolessa Deksissa					Lily Liang	
Janet Burton	Wellela Hirpassa					Mahmoud Wagdy	
Laurie B. Thompson	William Hare					Nian Ashlee Zhang	
Lena Walton	Barbara Harvey					Paul Cotae	
Leslie Richards						Pradeep Behera	
Lisa Moon						Sasan Haghani	
Marilyn Hamilton						Seon Ho Kim	
Otto Santa Ana						Sherali Zeadally	
Rachel Petty						Stanley Onye	
Rosemary Bolig							
Rosie Sneed							
Shurron Farmer							
Sinclair Jeter							
Suzan Harkness							
Sylvia Benatti							
Sylvia Hill							
Thomas Bullock							
Valbona Bejleri							
Xueqing Song							