# THE UPSTATE LOUIS STOKES ALLIANCE FOR MINORITY PARTICIPATION

# ULSAMP SCHOLAR PROFILES

The Upstate Louis Stokes Alliance for Minority Participation is dedicated to increasing the number of historically underrepresented students receiving four-year degrees in science, technology, engineering, and mathematics.



#### THE UPSTATE LOUIS STOKES ALLIANCE FOR MINORITY PARTICIPATION (ULSAMP)

The Upstate LSAMP alliance was formed in 2007 and comprises seven institutions of higher education in the Upstate New York region. There are five 4-year institutions and two community colleges in the alliance: Clarkson University, Cornell University, Monroe Community College, Onondaga Community College, Rensselaer Polytechnic Institute, Rochester Institute of Technology, and Syracuse University (Lead Institution). These institutions - public and private, large and small, undergraduate, comprehensive and doctoral – are together determined to impact the region in the near-term by increasing substantially the number of underrepresented students who complete degrees in science, technology, engineering and mathematics (STEM) disciplines and, in the long-term, by increasing the numbers who move into related careers, including graduate school on the way to a professorial or research appointment.

The ULSAMP institutions are located in the Upstate New York region, which spans from the Hudson River Valley to Lake Ontario on the north coast of New York, and boasts a stellar tradition of cultural diversity, an array of institutions of higher education ranging from community colleges to distinguished research institutions, and pioneering industrial and technological innovations. The ULSAMP alliance provides a mechanism to synthesize these three regional assets and enables the institutions to contribute to the regional and national need for academically talented individuals prepared to make significant contributions to a high-tech workforce.













#### Clarkson University

Clarkson University is an independent technological university offering baccalaureate, masters, and doctoral degrees. In the spring of 2011 3,202 students (2,722 undergraduate) were enrolled in one of Clarkson's 50 degree granting programs (21 STEM) which include engineering, science, mathematics, business, liberal arts, and interdisciplinary majors. Clarkson is nationally ranked, with nine Ph.D. programs among its engineering and science departments. Clarkson's enrollment has continued to increase allowing for many recruitment opportunities in the STEM fields.



David Yambay graduated in May with a bachelor's degree in Electrical Engineering. David has performed research since his freshman year under the guidance of Professor Stephanie Schuckers in the Biomedical Signal Analysis

Lab. David has had the opportunity to publish some of his research findings prior to graduating this May. David has visited with the Department of Defense and several local and national politicians discussing his research. David was awarded second place this year at the Annual Statewide CSTEP Student Research Conference in the technical division. This summer David began his graduate work at Clarkson University in electrical engineering.

Brooke Clare, a civil engineer student completed a successful



junior year. Brooke has spent the past two summers doing faculty guided research at Clarkson University with the McNair Scholars program in the Civil Engineering department developing an alternative binding

material used to supplement cement. Her research and academic achievements helped her achieve several awards including third place in the Technical Research Experience competition, at the National Society of Black Engineers (NSBE) fall regional conference, and first place in Engineers of Tomorrow Technical Bowl. In addition to her many accomplishments this year, Brooke expanded her academics internationally as she took the spring 2011 semester to study abroad in Hong Kong. Brooke presented her research at the University of Buffalo's annual McNair conference, as well as, Clarkson's SURE symposium. Brooke is a member of Women in Science and Engineering (WISE), where she helps plan and organize events to enhance women's skills in the STEM fields. She also is Clarkson's Academic excellence intern for the National Society of Black Engineers (NSBE) and member of Clarkson's emerging Leaders program.



Theodore Glave graduated in May with a Bachelor's degree in Chemical Engineering. Theodore was a McNair Scholar at Clarkson and completed a summer Research Experience (REU) at the University

of Buffalo. Theo presented his research at NSBE Region 1

Conference two years in a row and at the NSBE National Conference taking first place both years. Theo presented his research at the CSTEP statewide conference in the technical division and took first place two consecutive years as well. He was also part of the NSBE Clarkson team who beat Cornell University to win the Engineers of Tomorrow Technical Bowl. Theo won Boeings Flight Competition Judge's award and in 2010 was named Battelle Collegiate Scholar. Theodore won Clarkson Universities Institutional Diversity Initiatives award and is a member of the National Honor Society. Theo spent the summer at GE as a summer intern, and he plans to start his graduate program at Texas A&M in engineering this fall.

Rama Yakubu graduated in May with great distinction in Biomedical Science. Rama was a member of the Honors Program at Clarkson. Rama completed a summer internship



with the United Negro College Fund (UNCF), as a Merk Scholar in Pennsylvania. Rama worked on siRNA lipid nanoparticle delivery vehicles in the RNA therapeutics department.

Rama begins a MD/PhD program at Albert Einstein University this fall.

Emmanuel Asare graduated from Clarkson University with a BS in Biology in 2009. As an undergraduate Emmanuel was an excellent student with a passion for science and a very



strong interest in research. He was a member of Clarkson's Honor's Program and prior to leaving Clarkson presented his undergraduate thesis on campus" phylogenetic relationships among

Australian agamid lizards using nuclear mitochondrial DNA Data." He was an RA and a TA and completed a summer of research as a Ronald E. McNair Scholar. As an undergraduate Emmanuel also completed a summer of research at Fordham University as an intern at the American Museum of History. Currently Emmanuel is a PhD student at SUNY Stony Brook where he is an LSAMP Bridge to the Doctorate Fellow.

#### **CORNELL UNIVERSITY**

Cornell University, in the center of the Upstate region, is both a private university and the land-grant institution of New York State. Cornell is also the most educationally diverse member of the Ivy League and is a partner of the State University of New York. The university has seven undergraduate units and four graduate and professional units in Ithaca, two medical graduate and professional units in New York City, and one in Doha, Qatar. Cornell's enrollment, drawn worldwide to its stellar programs, includes over 13,900 undergraduate and over 6,700 graduate/professional students. The College of Engineering provides undergraduate students with the opportunity to select from 13 majors across 11 different engineering fields.



Casey Boyle is studying Mechanical Engineering at the University of Michigan and expected to graduate in May 2013 with a Bachelor of Science. Casey reports that through his ULSAMP undergraduate summer

research experience he learned the importance of research as well as the time and effort required to make sound and informed decisions regarding research. Further, he credits his LSAMP experience as his motivation to continue performing research in the future.

Christopher Castorena completed his Bachelor of Science in



Operation Research in 2009 at Cornell University. While at Cornell, he participated in the 2008 Cornell University LSAMP Summer Research Program. It was the LSAMP experience that allowed him to

explore her interests and figure out what he wanted research in graduate school. Currently, he is pursuing a PhD in Computational Biology at Duke University in Durham, NC.



Selisa Rollins attended Arizona State University and graduated with a Bachelor of Science in Chemical Engineering in 2010. She participated in Cornell University LSAMP Summer

Research Program in 2008. She stated that her participation in the program served as a great introduction to rigor of conducting academic research. This program influenced her decision to ultimately pursue a PhD.



Florencia Paredes is a Cornell University LSAMP Scholar and Cornell Engineering 2011 Alumna. She joined LSAMP Scholars Program in 2009. She earned a Bachelor of Science

degree in Material Science and Engineering. During her

participation in LSAMP, Florencia performed undergraduate research internal and externally to Cornell. She has been the recipient of various research poster presentation awards such as a First Place poster presenter at the 2011 Emerging Researchers National Conference in STEM and a second place award for a poster presentation at the HENAAC 2011 Technical Poster Competition. Presently, Florencia is a Masters graduate student at Stanford University in the department of Material Science and Engineering.

Justin Fisher is pursuing a Bachelor of Science Degree in



Civil and Environmental Engineering at Mississippi State University. Recently, he was awarded the William Parker Memorial Scholarship and the S.D. Bechtel Jr. Foundation

Engineering Scholarship. He is planning to pursue a PhD in Architectural Engineering.



Andrew Watson received his Bachelor of Science Degree in Electrical and Computer Engineering at Rutgers University in May 2011. As a LSAMP Research Scholar he enjoyed his experience in LSAMP

because it afforded him the opportunity to network with students, staff and professionals. He is pursuing his Master's Degree from Rutgers University in Sustainability.

Darvin Griffin, a Mississippi State University alumnus,



became a LSAMP Research Scholar in 2008 at Cornell University and he was mentored by Lawrence Bonassar, Professor and Associate Chair, Department of Biomedical Engineering &

Mechanical and Aerospace Engineering. Darvin is now a PhD student at Cornell University in the Department of Biomedical Engineering. He was awarded a NSF Graduate Fellowship Award in 2009. Further, Darvin mentors undergraduate researchers that participate in the Cornell University LSAMP Summer Research Program.

#### Monroe Community College

Monroe Community College is many things: a place to continue learning and acquire career skills, a foundation for a four-year degree, a center for academic and cultural opportunities, a vital catalyst for workforce development, and so much more. Nationally ranked and recognized as one of the most innovative community colleges in North America, MCC is also one of the best academic values in the country. MCC, in Rochester, NY grants over 83 different Associates Degrees, as well as a variety of certificate programs. From 2007 to 2009, MCC's total average annual enrollment was 36,258. MCC continues to deliver prepared, motivated students to our four-year partners; strengthening the support and opportunities provided at the two-year college and the pipeline to transfer institutions.



Maurice Bailey- earned his Associates in Biotechnology in 2010. Upon completing his AS degree, Maurice transferred to Rochester Institute of Technology under the ULSAMP consortium to pursue Biological Sciences under the auspices of Professor Osgood. His research on The Possibility of

Cytokines Influencing Bacterial Biofilm Production by Nontypeable Haemophilus Influenzae was presented in the LSAMP conference at Cornell University. Maurice is currently, conducting research at Brookhaven National Lab.

Leslie Courtad—earned her Associates in Liberal Arts with a concentration in Biology and Chemistry in 2010. Leslie



graduated with honors, a member of Phi Theta Kappa (PTK) and is currently at University of Texas pursuing pre-medical program. Leslie will graduate in 2012 with expectations to enter medical school in the fall 2012 term. While at Monroe

Community College, Leslie participated in the Model United Nations program, Collegiate Science Technology Entry Program forums focusing on career awareness and leadership development.

**Shawn Gist**—earned his Associates Degree in Liberal Arts with a concentration in Environmental Sciences in 2011.



During the summer of 2009, Shawn participated in the SUNY Upstate to the Baccalaureate Program at Binghamton University. Shawn conducted research on Roadside Disposition of Nitrogen Compounds within Binghamton area. The summer of 2010, Shawn will set out to complete his Bachelors in Science at SUNY

Fredonia pursuing a program in environmental and agricultural science.



Shartrice Roberts earned her Associates Degree in Biology in 2010. During the summer of 2010, Shartrice participated in the SUNY Upstate to the Baccalaureate Program at Binghamton University. Shartrice conducted research on Evaluation of DRD2 as a pertinent Gene for the aggressive temperament in Equus Caballus.

In the fall of 2010, Shartrice transferred to the University of Rochester to pursue a degree in Biology and Public Health.

Yusuf Abdi enrolled at Monroe Community College and



participated in the Summer ULSAMP program in the summer of 2010. He has transferred to SUNY Geneseo to complete a BS degree in Applied Mathematics. In the summer of 2011, Yusuf worked as a Teaching Assistant in the summer program sponsored by ULSAMP. Yusuf taught 15

college freshman math review and problem solving applications along with faculty in the program.

Efigenia Bonano earned her Associates in Liberal Arts with a



concentration in Chemistry in 2010. During the summer of 2011, Efigenia participated in the SUNY Upstate to the Baccalaureate Program at Binghamton University. This fall, Efigenia enrolled at the University of Massachusetts to pursue

Bachelors in Microbiological Sciences.

Mohamed Mohamed earned his Associates Degree in Liberal Arts with a concentration in Biology and Mathematics in



2011. Mohamed participated in the SUNY Upstate to the Baccalaureate Program at Binghamton University. His research The Effects of Monoamine Depletion on Motor Performance and L-DOPA-Induced Dyskinesia in the Hemiparkinsonian Rat won him first place in the Natural Science category of the CSTEP State Conference.

Mohamed is now at Binghamton University completing a Bachelor's in Chemistry.



Carlos Wu Bu earned his Associates in Engineering Science in 2009. While at Monroe Community College, Carlos was active in the undergraduate Engineering council, CSTEP forums and outreach activities. He enrolled in Rochester Institute of Technology to pursue a Bachelor's Degree in Industrial Engineering, Carlos graduated in

2011. He is currently employed at Delphi Inc. as an Engineer.



Mary Ramirez earned her Associates Degree in Liberal Arts with a concentration in Biology in 2010. During the summer of 2010, Mary conducted research through the SUNY Upstate to the Baccalaureate Program at Binghamton

University. In the fall of 2010, Mary transferred to pursue a Bachelor Degree in Biology at the College at Brockport.

#### Onondaga Community College

Onondaga Community College is the second largest educational institution in the region, the fastest growing college in the SUNY system, and one of the fastest growing community colleges in the nation. The College is jointly sponsored by the State University of New York and Onondaga County and is accredited by the Middle States Commission on Higher Education. OCC offers over 50 degree and certificate programs, serving as a gateway to higher education for individuals of all ages and backgrounds, including many first-generation, low-income students. OCC has articulation agreements with over 30 four-year institutions in over 80 degree programs. Students can pursue a bachelor's or master's degree on the OCC campus at any of the nine colleges or universities who participate in the Regional Higher Education Center. Enrollment at OCC was 11,899 in spring 2011 and STEM majors were at 9%.

Biribwa. D. Arinaitwe, was a math/science major at



Onondaga Community College during 2008-2009. As a LSAMP scholar, she maintained a 3.71 GPA. She was named to Phi Theta Kappa, Provost Academic List and served as a math & biology tutor in the program. Biribwa completed two scientific

research programs at the Binghamton University Bridges to Baccalaureate Program. Biribwa transferred to Binghamton University where she just completed her bachelor's degree program in pre-med, graduating on Binghamton's dean's list and was the first recipient of the Harpur Fellows Program where she traveled back to Uganda to established the 'Rehabilitating the Ex-LRA Abductees, One Stich at a Time' project.

Kennedy M. Mihigo, a Provost Academic award recipient,



member of Phi Theta Kappa and an LSAMP scholar, Kennedy graduated from Onondaga Community College in 2009 with an associate degree in Mechanical Technology while completing his program with a 3.67 GPA. Before transferring to Rochester Institute of

Technology, he completed a 10-week LSAMP sponsored scientific research experience at RIT in high-efficiency, high gain power amplification based for wireless transmitters based in syncrodyne amplification.

Lisa L. GreenPope, a 2008 math/science graduate at Onondaga Community College, was one of the first students



to enroll in the LSAMP program. Before leaving OCC, Lisa received awards from the National Coca-Cola Scholarship, SUNY Chancellor's Award for Student Excellence, Allyn Honor's Award, Faculty Endowed Award for Academic Excellence and was Vice President of Phi

Theta Kappa before transferring to Binghamton University. Lisa participated in BU's Bridges to Baccalaureate REU program and a 2009 internship at the National Institutes of Health Clinical Center. Lisa graduated magna cum laud from Decker School of Nursing and is now pursuing her master's degree in public health at the University at Albany.



Manuel E. Santana, a 2011 graduate of Onondaga Community College in engineering science, finished with a 3.90 GPA as an LSAMP scholar. Manuel transferred to L.C. Smith School of Engineering at Syracuse University where

he has been accepted into the graduate program for mechanical engineering. He is pursuing his career goal to design high efficiency environmentally friendly energy systems. Manuel received a B.S. in Environmental Biology from SUNY College of Environmental Science and Forestry in 2009. At OCC, he was a member of Phi Theta Kappa and received a leadership award for effort in tutoring in math and physics. Manuel participated in summer research in the area, designing a synthetic jet actuator module at Syracuse University.



Christian A. Sias, attended Onondaga Community College as a math/science major in 2010-2011 and joined the LSAMP program. Christian made the Provost's List with a GPA of 3.16. This fall, Christian will be studying at University of Maryland Baltimore County

and applying to UMBC's B.S./Master's Dual 5-year program in Applied Mathematics. This past summer, he participated in 10-week scientific research project in structural chemistry sponsored by LSAMP at Cornell University.

**Sarah E. Pluff,** a 2010 graduate of Onondaga Community College in math/science, was very focused on her goal to study medicine, which led her to become an LSAMP scholar.



While at OCC, Sarah was nominated for the SUNY Chancellor's Award for Student Excellence, president of Phi Theta Kappa and conducted summer research in exploring the differences between two DNA binding assays at

Binghamton's Bridges to Baccalaureate Program. Sarah finished with a 3.63 GPA. Currently a senior at Upstate Medical University in their medical technology program, Sarah received the Minorities Honor Scholarship (Hispanic) and completed research in respiratory syncytial virus in children while maintaining 3.72 GPA. She will be enrolling in their physician's assistant program next academic year.

#### Rensselaer Polytechnic Institute

Rensselaer Polytechnic Institute, located in the NY state capitol district, is the nation's oldest technological university. Since its beginning in 1824, Rensselaer maintains its mission of technology in service of humanity. The STEM disciplines are an undercurrent in all degree programs and areas of scholarship - from the traditional fields of Science and Engineering to the Arts, Humanities and Business. Today, Rensselaer has approximately 5200 undergraduates and 1200 graduate students on the Troy, NY campus, with the majority of these students in Science and Engineering. Rensselaer has a campus in Hartford, Connecticut with programs for the part time student and adult learner in Engineering, Computer Science and Business. There are currently 1200 part time students enrolled in the programs administered on the Hartford campus.

Raquel Auwae is a sophomore Bioengineering major at the



University of Hawaii at Manoa. She participated in the RPI Summer LSAMP Research Program in 2011 and worked on a project titled, *Identification of Heparan* sulfate 3-O-sulfotransferase 1(3-OST1)

using Proteomics Approach. In addition to bioengineering, she is interested cell & molecular biology. The LSAMP program has given her "a better understanding of what scientists and engineers do, and what it's like to be in their shoes doing research." After participating I the program she has decided to pursue graduate study.

**Ivan Valerio,** is a Junior Applied Physics major at Rensselaer Polytechnic Institute. He participated in the RPI Summer Research Program in 2011 and worked on a project entitled,



Pressure Effects on the Morphology of Mammalian Cells. Ivan believes that "physics is not just to discover new facts or information about the world around us, but also to apply those new discoveries and improve technology that

will allow us to advance as a society." He plans to continue with physics in graduate school and enter the professoriate. Joining LSAMP has allowed him to expand his horizons and provided him with a better understanding of laboratory research. His research experience has increased his desire to attend graduate school.



Laura Lopez Cruz, is a junior majoring in mathematics at the University of Puerto Rico, Mayaguez Campus. She participated in the RPI Summer Research Program in 2011 and worked on a project entitled. Assessment of

Gustiness for Pantex2 site in West Texas. She was nervous about participating in the LSAMP research experience, but her passion for mathematics kept her enthused throughout the semester, as she explored the field and discovered new aspects that truly fascinated her. She presented the results of her project in the Puerto Rico Interdisciplinary Scientific Meeting (PRISM) joined with the American Chemical Society Junior Technical Meeting and the Inter-institutional Seminary of Mathematical Research (SIDIM). She is now interested in pursuing a Ph.D.

Shaniqua Johnson, is a sophomore majoring in chemistry at



Cornell University. She participated in the RPI Summer Research Program in 2011 and worked on a project entitled, Astrobiology :Microenvironments and their effects on RNA

polymerization. Shaniqua came into the program during the summer after her freshman year to get research experience early in order to gain experience and learn what area of chemistry she wanted to pursue. One of her favorite quotes guided her in her outlook. 'In order to experience life, you have to Experience everything, Regret nothing.' After participating in the LSAMP program, she now plans to go to graduate school and study forensic science.



Morgan Jackson, is a sophomore majoring in biology at Villanova University. He participated in the RPI Summer Research Program in 2011 and worked on a project entitled, *Amyloid* 

Fibril Core Sequence of a 39-Residue Peptide (PAPf39) from Human Prostatic Phosphatase. Morgan started conducting research after his first year of school. His academic interests have led him to a mathematics and computer science major, with a strong interest in the field of bioinformatics. After participating in the LSAMP research program, he now plans to pursue a combination of bioinformatics and molecular genetics for his graduate studies.



Jade Benjamin, is a senior majoring in Biomedical Engineering at Rensselaer Polytechnic Institute. She participated in the RPI Summer Research Program in 2011 and worked on a project entitled Drug Loading of Naproxen

Sodium on the Degradation Characteristics of Polycaprolactone. Jade has been focused her whole college career and dedicated to STEM research. After participating in the LSAMP summer program, she has set up a road map for her engineering future. She plans to obtain her master's degree in Tissue Engineering with a Nanotechnology application with a nervous tissue concentration, then go on to obtain a Doctorate in Biological Engineering involving genetic engineering. She wants to pursue this research path in order to help find cures for genetic diseases or cancer.

Rochester Institute of Technology

Rochester Institute of Technology (RIT) is a comprehensive Masters University with an emphasis on applied research in such areas as Imaging, Microsystems, Information Technology, Manufacturing and Sustainability. RIT enrolls nearly 17,206 full and part-time undergraduate and graduate students in more than 150 career-oriented and professional programs and has the fourth oldest, and one of the largest cooperative education programs in the world. RIT's strategic focus on increasing underrepresented students has created opportunities for partnering with urban school districts, community colleges and community based organizations.

Luticha Doucette, Ms. Wheelchair New York, overcomes disability and engages in research and community service.



Luticha has participated in ULSAMP for the past two years researching on computer languages and programs that are used in molecular visualization. She has presented posters at the Annual Biomedical Research Conference for

Minority Students. Luticha is also a member of the Professional Chemical Fraternity: Alpha Chi Sigma and a Disability Rights Advocate.

Corey Mack earned his BS degree in spring 2011. As an

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From left, Edison Tech students Vamunya Kamara, 15, and Joseph Foster, 14, and RIT senior Corey Mack work on reconnecting a wire to a robot the team is working on at the city schools' Rochester Engineering Center.

#### School robots 'teach' science to Rochester students

ULSAMP student developed and entered the Collegiate Green Vehicle Competition. Corey has also developed a system of emergency housing using large shipping containers. Always active in the community Corey is shown here working with high school students preparing for the "First Robotics Competition.



Maurice Bailey a transfer student from Monroe Community College transferred to RIT in 2010. After spending the summer researching with Dr. Robert Osgood on Biofilm he was asked to participate in a research project with Brookhaven National Laboratory. He worked on project entitled, Palladiumcatalyzed Aminocarbonylation of Aryl Halides under **Ambient** Reaction Conditions" was under the mentorship of Dr. Michael Coleman. After these LSAMP experiences, Maurice states that his

confidence and knowledge in chemistry has been greatly enhanced and will contribute to his future success in graduate school.

#### Other LSAMP Research Scholars

**Charmaine Williams, LaKeitha** Patterson Robert Osgood, Quantitation of *Streptococcus mutans* using PCR,(2009). 2009 CSTEP Conference, The Sagamore at Lake George, Boltons Landing, New York

Briana Williams, Robert Osgood, (2010). The Effect of Honey on Biofilm Formation of Nontypeable *Haemophilus influenzae* Under Aerobic, Microaerophilic and Anaerobic Conditions (Oral presentation), RIT Undergraduate Research Symposium, Rochester Institute of Technology

**Paule Boli**, Robert Osgood, (2010). Influence of Antibiotics on Biofilm Formation in *Staphylococcus aureus* and *Staphylococcus epidermidis*, (Oral presentation). RIT Undergraduate Research Symposium, Rochester Institute of Technology

**Paule, Boli**, Robert Osgood, (2010). Influence of Antibiotics on Biofilm Formation in *Staphylococcus aureus* and *Staphylococcus epidermidis*, (Poster), Cornell LSAMP Conference, Cornell University

**Alexandria Kelly**, Robert Osgood, (2010). Preliminary Investigation of the Influence of Heparin Concentration on *Staphylococcus aureus* Biofilm Formation (Poster), RIT Undergraduate Research Symposium, Rochester Institute of Technology

Uchenna Azogu, Robert Osgood, (2010). The Effect of pH on *Haemophilus influenzae* Biofilm Formation Under Aerobic, Microaerophilic and Anaerobic Conditions (Oral presentation) RIT Undergraduate Research Symposium, Rochester Institute of Technology

**Ravien Moorehead**, Robert Osgood, (2010). The Effect of Nutrient Depletion on *Haemophilus influenzae* Biofilm Formation (Oral presentation), RIT Undergraduate Research Symposium, Rochester Institute of Technology

**Ravien Moorehead,** Robert Osgood, (2010). Effect of Nutrient Depletion on *Haemophilus influenzae* Biofilm Formation (Poster), Cornell LSAMP Conference, Cornell University

Maurice Bailey, Robert Osgood, (2010). Biofilm Formation and its Relationship with Inflammation and the Causative Agent, *Haemophilus influenzae* (Oral presentation), RIT Undergraduate Research Symposium, Rochester Institute of Technology

#### Syracuse University

From its founding in 1870, Syracuse University has been the embodiment of Scholarship in Action—education that transcends traditional boundaries through a combination of innovative thinking, daring choices and entrepreneurial attitude. Our iconic campus is nestled amongst the rolling hills of Central New York—itself a crucible of historic changes and progress. Building on that foundation, SU continues to create opportunities for students and faculty to push limits, build pathways, and make connections that lead to new discoveries and transformational change. Enrollment is 11,455 undergraduate, and over 6,000 graduate and law students. An active effort to link students to the world, both locally and globally, the Upstate LSAMP Alliance has been a unique venue for advancing this agenda through the enhancement of campus diversity.



Jennifer Cadestin is a junior who is majoring in biology with a pre-med concentration and a minor in psychology. She is a Dean's List scholar and Wellslink Scholar. After Cadestin attended a mini-medical school program with the Robert Wood Johnson Medical School, "I realized a field in science was

something I wanted to achieve," she says. Cadestin is a volunteer in the SUNY Upstate Medical University's Family Resource Center. She plans to become a pediatric neurologist.



Janique Cheesman is a senior who is majoring in environmental engineering. She is a McNair Scholar who also obtained the EPA Greater Research Opportunities Fellowship. Cheesman decided on a career in science, "When I realized how much of a positive contribution

I could make to society by using my skills in engineering and science," she says. Cheesman plans to pursue graduate degrees in sustainable engineering.



Michael A.C. Foulkes is a senior who is majoring in chemistry and mathematics with a minor in biology. Foulkes is a Dean's List scholar and a recipient of the Leon M. Woods Academic Scholarship Award and a participant in the Reneé Crown University Honors

Program. His internships include the Doctor's Hospital in the Bahamas and the Oxford Traditional Medical Program. Foulkes is applying to graduate programs, medical schools and for job opportunities.



**Dennis Frazer** is a junior biomedical engineering major. He was accepted into the Renee Crown Honors Program in 2010. Frazer researched neural regeneration as an intern at the Syracuse Biomaterials Institute.

Frazer aspires to become a physician. That goal he says has "always been my dream." He is also interested in becoming a research scientist and focusing on biomedical engineering.



Frances Julian Gonzalez is a thirdyear undergraduate student majoring in aerospace engineering and he intends to minor in physics and mathematics. Gonzales is a recipient of the Igor Sikorsky Scholarship, a three-time recipient of the Henry Street Settlement Youth Scholarship

and he is in the L.C. Smith College of Engineering and Computer Science PRIDE Circle of Honors. Gonzales hopes to work at Sikorsky Aircraft or conduct research at Syracuse or Cornell universities.



**Kemardo Henry** is a senior majoring in biochemistry. He received the Jack Kent Cooke Undergraduate Transfer Scholarship. Henry is also a Renee Crown Scholar who has been on the Dean's List every semester while at Syracuse.

Henry plans to continue his studies and pursue a doctorate degree. He plans to explore the medical properties of the chemicals produced by plants.



Joseph Hourie is a senior who is majoring in biology with a minor in psychology. Ilourie is a Ronald E. McNair Scholar who has also received the Emerging Student Leader Award from Morgan Stanley. He is also a National Society of

Collegiate Scholar. Ilourie is continuing his second year of research in the ophthalmology department at the SUNY Upstate Medical School. He plans to continue his studies and earn master's and doctorate degrees.

### Syracuse University



Mireily Mir is a senior majoring in mechanical engineering. She has been on the Dean's List three times. Mir is interested in addressing people's special needs through mechanical engineering by improving the design of everyday

products used by the elderly and children. She plans to pursue a doctorate degree.



Sofia Alia Pezoa is third-year undergraduate student majoring in biology with a minor in Spanish. She is conducting a distinction in biology thesis. Last summer Pezoa was a LSAMP research fellow and received an honorary mention for

her research at the Syracuse University Summer Research Symposium. She plans to attend medical school.



Amiya Quidley is a junior who is majoring in chemical engineering with a minor in information management and technology. She is a Dean's Scholarship recipient. Quidley is a member of the National Society of Black Engineers and the American

Institute of Chemical Engineers. She had an internship at Virginia Polytechnic Institute and State University through the Multicultural Academic Opportunities Program. Quidley plans to conduct medical research to develop treatments diseases and disorders.



Luis F. Romo is a graduate student who is pursuing a master's degree in biomedical engineering. The medical device company Romo founded, HELIOS Innovative Technologies Inc., earned the first-place and grand prize positions at the 2011 New York State Business

Plan Competition. Romo is a member of the Student Philanthropy Council and a researcher at the SUNY Upstate Medical School. He was an LSAMP student during his undergraduate career and is now the LSAMP graduate assistant and helps coordinate student events for the program.



Zenille Saunders is a senior who is majoring in environmental engineering and political science. She is a Coronat Scholar who was inducted into the Chi Epsilon Civil and Environmental Engineering Honor Society this year. Saunders was also a Cramer Scholar at the Interdisciplinary Center at

Herzliya, Israel. She is applying to graduate schools and plans to earn an advanced degree in environmental engineering. Zenille is very active on campus and is currently serving as the president of the Syracuse University chapter of the National Society of Black Engineers (NSBE).



Asia Terry is a senior who is majoring in mechanical engineering. She received the Pride Circle of Honor and Circle of Achievement award while studying at Syracuse University. Terry realized she wanted to pursue a career related to math and

science after her high school teachers introduced her to engineering. Terry is preparing for graduate school.



LaToya Welch is a graduate student at Syracuse University pursuing her Master's Degree in Information Management. As an LSAMP student she earned a Bachelor of Science in Information Management and Technology degree. She currently works for an IT company in Vienna, VA. LaToya also has the honor of

being a Gates Millennium Scholar. Throughout her years in the LSAMP program, she had the opportunity to network and strengthen her academic and communication skills.



Theodore Williams is a senior who is majoring in environmental engineering with an environmental policy minor. He is the Emerging Researchers National Conference engineering and technology winner. He is also the winner of the Invention and Creativity

Competition and the Annual Life Science Symposium. Williams plans to attend graduate school and plans to study renewable energy/sustainable engineering.