

Ebony Brooks Graduated from Illinois State University in the spring of 2006 with a Bachelor of Science degree in mathematics with a minor in Accounting. She is currently a Finance Coordinator at University of Illinois at Chicago where she coordinates fiscal matters associated with the operations and sponsored research

programs of the U.S. Air Force. She is successfully using her STEM degree in her career.

Jose Arceo graduated from Illinois State University with a Bachelor of Science degree in Chemistry in 2010. He has started his career at CSL Behring, a biotherapy pharmaceutical company, located in Kankakee, IL. Thus far he has had experience in two career areas. He has worked as a process quality control analyst



at CSL Behring in the chemistry lab. He was also a Parenteral Supervisor. Jose is currently in the process of working toward a master's degree in analytical chemistry from Governors State University.



Jillian Shelby graduated from Illinois State University in 2006. She chose to combine her interests in biological sciences with interest in Public Relations for a career goal. Following this path she minored in biology and majored in public relations. Currently Jillian is working with Commercial Center Underwriter at

Fireman's Fund Insurance Company in Chicago

Stephanie Atwood credits the teaching ability of instructors at Olive-Harvey College with her success. Stephanie completed prerequisites for the nursing program at Olive-Harvey College with a GPA of 3.5, then transferred to Kennedy-King College and completed the Nursing Program and graduated with honors in



2005. She went on to work at the University of Chicago Medical Center in their Burn/ICU Unit. She furthered her education at the University of Phoenix, graduating in the BSN Program. Stephanie continued her education and graduated with a MSN/MBA and Health Care Management Certificate. Inspired by professors in the City Colleges of Chicago she has started teaching and is now a Visiting Professor at Chamberlain College, Addison, IL. She has returned to school to complete requirements to become a Family Nurse Practitioner (FNP). Speaking of influential instructors, Professor Austin Ferguson, at OHC was key. Stephanie asserts "(his) guidance and commitment to furthering education of those in the community has helped me make decisions to assist others whether it be tutoring, inspiration, or just a kind word.



Aiesha Phillips graduated from the Illinois State University in 2010. Interested in STEM, she majored in Biological Science and obtained a minor in Chemistry. Aiesha was very active and contributed time and energy to university organizations and became the secretary of the Black Student Union at Illinois State

University. She is now in graduate school at Roosevelt University.

**Dr. Crystal Porter** received her Bachelor degree in chemistry from Chicago State University and her doctorate from the Missouri University of Science and Technology. Dr. Porter started her career as a research scientist at Unilever where she substantiated claims and supported aid-to-formulation. She has been a hair



scientist at the L'Oréal Institute for Ethnic Hair & Skin Research for nine years. As manager, she oversees the Physics Laboratory and Consumer Insights team to study the biophysical characteristics of hair and pigmented skin within different ethnic groups and to understand behaviors that are related to those inherent properties. She shares knowledge that she obtains with fellow scientists and consumers at both national and international venues. She has also contributed to L'Oreal's global classification of curl in hair and has authored numerous papers, presentations and a book chapter on hair straightening.



Zändra X. Chisolm-El earned a Bachelor's of Science degree in biochemistry with a minor in biology from Chicago State University. As an undergraduate she was a member of the Minority Biomedical Research Support and Research Initiative for Scientific Enhancement (MBRS-Rise) program, a research assistant, and tutor for the chemistry

department at CSU's Chemistry department. Following graduation, she was awarded a Dean's Scholarship from the chemistry department at Illinois Institute of Technology where she is scheduled to complete a Master's of Science in Polymer Chemistry in December 2012. In graduate school she has focused her research on the synthesis and modification of novel "green" and "recyclable" poly-lithium ion salts. Upon completion she will continue her educational pursuits by obtaining a Ph.D. in Inorganic chemistry from Loyola University of Chicago.

Leesha Howard-McCauley has been employed by the U.S. Forest Service for four years as a botanist intern while completing her degree. As an ILSAMP scholar at Governors State University she conducted research on tall grass prairie restoration and plant species functional traits. She recently graduated from



Governors State University with a Masters degree in Environmental Biology. She soon will be promoted to NEPA/Natural Resource Specialist with the U.S. Forest Service.



Cherie Allen is currently a senior at Southern Illinois University at Carbondale working toward a B.S. degree in Biological Sciences. Working with her mentor Dr. April Strader, Cherie conducted an undergraduate research project entitled "Increased Intestinal Expression of the Glucose Transporter 2 Following Ileal Interposition

in the Rat.'

Lizbeth Rodriguez graduated from DePaul University in 2009 with B.S. Biological Sciences. She is currently at the University of Illinois at Chicago College of Medicine starting her second year of medicine. At DePaul, she participated in the annual Undergraduate Science Showcase in 2008 and 2009. She also attended the Louis Stokes



Alliance for Minority Participation Conference in 2007 and 2009. Finally, she presented her research at the Midwest Ecology and Evolution Conference (MEEC) at Ohio University where she received the award for best poster presentation. Recently, one of the manuscripts was accepted for publication to the Journal of Parasitology titled Dispersal in the Acanthocephalan Acanthocephalus Dirus. "My AH HA moment occurred when I was in high school while doing volunteer work at Resurrection Medical Center", explains Rodriguez. "Nonetheless, my experience working with Dr. Timothy Sparkes, a faculty member in the Biological Sciences at DePaul, reinforced my interest in science and showed me the value of conducting research and working in a lab. Today, I'm still conducting community-base research and utilizing those valuable skills acquire while working with Dr. Sparkes as an ILSAMP Scholar.



Vanessa Enriquez is pursuing a doctoral degree at Colorado State University in Cell and Molecular Biology. She received a National Science Foundation Louis Stokes Alliance for Minority Participation/Bridge to the Doctorate Fellowship. She graduated from Southern Illinois University Carbondale with a B.S. degree in Zoology

in December 2007. As an undergraduate her achievements included the National Dean's List, National Collegiate Scholars, University Honors, the Zoology Club, the Wildlife Society, Chi Alpha, and the McNair Scholars Program. As a participant in ILSAMP, she worked with her mentor, Dr. Jodi Huggenvik.

Willie Walker graduated from Southern Illinois University Carbondale with a bachelor's degree in Industrial Technology in May 2007. He continued on to earn a Master's degree in Manufacturing Systems from SIUC in 2010. As an undergraduate, Willie was involved with the McNair Scholars



Program and the Illinois Louis Stokes Alliance for Minority Participation program (ILSAMP) where he worked with his mentor, Dr. Mandara Savage. He was also involved in numerous student organizations, including the National Society of Black Engineers (NSBE), SIU Marching Band, and the Black Affairs Council.



Laquita Smith graduated from Southern Illinois University Carbondale with her bachelor's degree in Industrial Technology in 2006. As an undergraduate, she was very involved in research. She participated in research projects with support from both the McNair Scholars program and the Illinois Louis Stokes Alliance for Minority

Participation (ILSAMP). Currently, Laquita works for The Northern Trust Company.

Nadia Lopez completed a master's degree in Anthropology from Northern Illinois University in August 2010. She earned a bachelor's degree in Zoology from Southern Illinois University Carbondale in 2007. As an undergraduate, her accomplishments included participation in the both the McNair Scholars Program and the Illinois Louis



Stokes Alliance for Minority Participation program (ILSAMP). She worked with Dr. Susan Ford on a project entitled *The Use and Preference of Structural Enrichment of Captive Callitrichid Primates*. She was also a member of other student organizations including, the Zoology Club, Wildlife Society, Beta Beta Biological Honors Society, and the Hispanic Student Council.



Carl Alexander graduated from SIUC with his bachelor's degree in Civil and Environmental Engineering. As an undergraduate Carl participated in both the McNair Scholars Program and ILSAMP. He conducted research in the lab of his mentor, Dr. Lizette Chevalier. Specifically he worked on a project entitled Color Reduction of Textile Industrial Dye

Using Granular Activated Carbon. Carl received several awards including the Dean's List, the Minority Engineering Scholarship, and a National Science Foundation Scholarship. Currently, he works as a Structural Engineer for Bechtel SAIC Company in Las Vegas, NV.

Patricia Elizabeth Harris earned her B.S. in Electrical Engineering at the University of Illinois at Chicago in the fall of 2010. She has been a dedicated member of the National Society of Black Engineers (NSBE) for nearly 8 years, which led her to wonderful internship opportunities with Caterpillar (for 7 months) and Toyota (for 4



months). As a member of UIC's Women in Science and Engineering (WISE) Chapter, I served as one of their mentors for younger female students pursing engineering. WISE chose me to represent them in a Chicago Sun-Times article where I expressed my personal experiences of being a minority in a STEM field. Additionally, WISE-UIC was awarded the Presidential Award from President Obama. Patricia is currently seeking a full-time position in the Electrical Engineering field where she can utilize her leadership skills, internship experience, and education to ensure the company's success.



Brice Jones is a junior Biological Sciences major at DePaul University. As a student leader, Jones is involved with a variety of STEM programs at the university. A recipient of the Elizabeth Morris

Genius Grant internship in the summer of 2011, Jones was an intern at Rosalind Franklin University and Medical School, participating in the lab of Dr. Kwang-Poo Chang, Ph.D., Professor of Microbiology and Immunology. Chang's NIH-supported research seeks to find ways to control cancer on the molecular level. "This opened my eyes to understanding what people go through in the lab to try and control cancer and help people throughout the world," Jones says. He worked with Dr. Chang and two other post-doctoral researchers, learning how to regroup and persevere with research after experiment attempts succeeded or failed. "They did not hold my hand -- it was me working by myself and figuring out how to do things better the next time. I had a great experience."

Shantira Norris received her Master's of Science from Illinois State University in 2011 after graduating with her Bachelors of Science in Technology from Illinois State University. She accepted a job at Technisource in June of 2011 as a consultant. Shantira is excited that she can work locally and is happy to remain in the Bloomington area.





Hemal Patel is a senior at DePaul University, who plans to graduate in winter 2012 with degrees in environmental studies and political science. Patel was an ILSAMP scholar and through his research published a paper in the 2<sup>nd</sup> volume of DePaul's Students Creating Knowledge Journal in

2010. He has received two outstanding research recognitions at the student research symposia. Patel says his "ah ha" moment came, "The day I started to converse with nature by her proper names and rejoiced with the rewards of plant identification in beautiful ecosystems. That was the day I knew I wanted to keep having those conversations. Working with mycorrhizal fungi has helped me view our world with a more precious attitude." After graduation Patel intends to travel to South Africa to work on a wild life preserve raising Pigmy Hippos, continue his herbarium, and help with the removal of invasive species.

Catrina Johnson chose a career in helping people to live a nutritionally healthy lifestyle. She is pursuing a Master's degree in Plant and Soil Science at Southern Illinois University at Carbondale. She continues to work with the Edible Curriculum in an effort to encourage healthy eating habits in children. Catrina earned her bachelor's degree at SIUC in the same field in December 2007.





Sonia Chavez is a senior Chemistry major at DePaul University. Sonia is involved with CIRRUS (Chicago Initiative for Research and Recruitment in Undergraduate Science), a NSF-funded STEP program. Through her participation in CIRRUS, Sonia conducted research at the undergraduate level, and has present her research at the DePaul Natural

Science, Mathematics and Technology Showcase, CAURS, and the Midwest Ecology and Evolution Conference. She will present at the October 2011 SACNAS National Conference. Sonia says it was CIRRUS that sparked her love of science, "It helped me to realize that I loved doing research and being in a lab. Organic Chemistry was also a moment when I found my calling. I really liked it. It fascinated me." She says of her own skills and career so far, "I'm a hard worker and I am skilled in various scientific instruments. I am very good at taking charge and pride myself as a student leader in the sciences at DePaul."

Wale Afolayan is a junior majoring in Biological Sciences, with minors in Theatre Studies and Peace Studies, at DePaul University. As a participant in DePaul's NSF-funded STEP program, CIRRUS (Chicago Initiative for Research and Recruitment in Undergraduate Science), Wale is a student leader in science. It was



watching TV with his father that first sparked his scientific curiosity, "My family got a real TV with cable when I was 9 or 10 years old. My dad loved watching animal planet and so did I. I was fascinated by all of the animals. This is when I realized I wanted to discover things like they did on TV." After graduation he hopes to attend John Hopkins Medical School because he "want to help people, to help them understand their situation and to help them get/feel better."



Guadalupe Rodriquez graduated with a B.S. in Biological Sciences from DePaul University in spring 2011. As an undergraduate Guadalupe worked with Dr. Jingjing Kipp on research related to female reproduction. She was interested in this area of research because of volunteer work she did in her uncle's family clinic. "[At the clinic] I was introduced to many

female patients suffering from a range of growing ovarian diseases. It was then that I realized my interest of wanting to learn more about clinical pathology involving the female reproductive system." Guadalupe, as part of Dr. Kipp's research lab team, published in the Journal of Endocrinology. After graduating from DePaul, she began working at Northwestern University studying Alzheimer's disease. She is now moving to New Haven, Connecticut on a one-year fellowship at Yale University to continue studying A-beta plaques as well as angiogenesis.



Itzel Godinez is a fifth year doctoral candidate in the department of Civil and Materials Engineering she was a fellow in the NSF-ILSAMP funded Bridge to the Doctorate program from 2006 to 2008. In 2009, she was granted the UIC Abraham Lincoln Fellowship, a competitive funding award for Ph.D. students. Itzel studied at the Institute of

Refrigeration and Cryogenics at Shanghai Jiao Tong University in China and she has presented her research on Overexploitation and Contamination of Shared Groundwater. Itzel completes doctoral studies in December 2011.

Laura Pedro Rosa is a fifth year doctoral candidate in the department of Chemistry at the University of Illinois at Chicago. She is a member of the 2006 2008 cohort of the NSF-ILSAMP Bridge to the Doctorate at UIC. Laura received a Bachelor of Science degree in chemistry from the University of Puerto Rico Rio Piedras Campus. An invitation to



participate in round table discussions at the NSF Joint Annual Meeting in 2010 is only a single demonstration of the 1<sup>st</sup> impression given a promising independent scientist. Laura is coauthor on four publications and is completing her doctoral thesis in the lab of Dr. Lawrence Miller. The title of her research is Antifolates as tools for Chemical Biology and Biotechnology.



Kellen Marshall-Gillespie is a third year doctoral student in the Ecology and Evolutionary Biology program at the University of Illinois at Chicago. Kellen was awarded the NSF-ILSAMP Bridge to the Doctorate at UIC and IGERT LEAP fellowships. Kellen is co-owner of an ecological services company and has served as Secretary of the Ecological Society of America

Environmental Justice Section. Kellen earned a B.S. degree from Chicago State University. Kellen is a member of the Mason-Gamer lab. Their research: Molecular phylogenetics, evolution of polyploids and hybrids, grass systematics.

O'Neil Shand is a fifth year doctoral candidate in the department of Microbiology and Immunology at the University of Illinois at Chicago. He received a Bachelor of Science degree in Microbiology and Cell Science from the University of Florida. O'Neil has been interested in science research since his participation in a summer high school program. He is the co-founder



of the science initiative at the James Jordan Boys and Girls Club in Chicago where he instructs middle school students in science through lab research and lecture. O'Neil is completing his doctoral research in the lab of Dr. Karl Volz. His research: the structure and function of a biological molecule that regulates cellular iron homeostasis.



Chantell Evans is pursuing a doctoral degree at Purdue University in the department of Medicinal Chemistry and Molecular Pharmacology. She graduated in May 2009 from Southern Illinois University Carbondale. As an undergraduate she with her mentor, Dr. Punit Kohli's, worked on a project entitled Investigation of reversibility in fluorescence resonance energy transfer.



Dr. Janai Carr completed the predoctoral research portion of her M.D./Ph.D. program in Biochemistry and Molecular Genetics in spring 2011. Her doctoral thesis work entitled FoxM1 Regulates Mammary Luminal Cell Differentiation was completed in the Raychaudhuri lab where Dr. Carr was praised as one of the most accomplished

students ever. She was an NSF-ILSAMP Bridge to the Doctorate at UIC fellow 2006 – 2008. Dr. Carr is an alumna of the University of California at San Diego and holds a Bachelor of Science degree in Biology. She is the recipient of a number of fellowships, scholarships, and awards including an NIH F31 and is co-author on multiple scientific publications. She is now completing the clinical portion of her Medical Scientist Training Program.

**Dr. Senta Furman** completed her doctoral studies in Neuroscience in summer 2011. Dr. Furman's Dissertation thesis research is entitled "Automonic Reactivity in Mother-Infant Dyads during Social Challenge. Senta completed her undergraduate studies in 2002 as a biology alumna of Wayne State University. She completed two years (2006 – 2008) as a



NSF-ILSAMP Bridge to the Doctorate Fellow at UIC. Dr. Furman is the co-author of a scientific journal publication. She has begun her clinical studies as a requirement of the Medical

Scientist Training Program (M.D./Ph.D.).



Wilson Barajas completed a Master of Science in Physics in 2009 and a Master of Education in Science Education in 2011 from the University of Illinois at Chicago. He joined the Physics graduate program in January of 2007. Wilson was a 2006 – 2008 NSF-ILSAMP Bridge to the Doctorate Fellow. After completing

his Physics degree, Wilson was accepted into the UIC College of Education Science Education masters program with an aspiration to teach high school physics. He was drawn to Science Education because of a life-long desire to teach others like himself to develop a passion for science and scientific research. Wilson also completed his undergraduate work at the University of Illinois at Chicago.

Geovannie Ojeda Torres, is a third year Ph.D. candidate in Chemistry at the University of Illinois at Chicago. His first two years of doctoral study were funded by the Bridge to the Doctorate fellowship. Geovannie started his research career as a freshman at the University of Puerto Rico – Rio Piedras Campus where he



earned a B.S. in Natural Sciences with a concentration in Chemistry in 2008. Geovannie earned a Master of Science degree in 2011 and is now working in the lab of Dr. Scott A. Shippy. The title of his doctoral thesis research project is Chemical Measurements to Guide Biomimetic Retinal Prostheis.



Keivan Sadrerafi is a second-year chemistry Ph.D. student at the University of Missouri Columbia. He earned a BA in chemistry in 2008 and a M.S. degree in chemistry in May of 2010, from Southern Illinois University Edwardsville, under the supervision of Professor Sadegh Khazaeli. The title of his master thesis was on "Quaternary Ammonium and Phosphonium Cations as Phase-Transfer

Catalysts Supported by Hectorite Clay for The Conversion of n-Hexylbromide to n-Hexylacetate", and he is currently working on synthesis of carborane derivatives of anticancer agents. He has presented his research at several regional ACS, and other regional conferences.

Kimber Leigh Cain graduated magna cum laude from Southern Illinois University Edwardsville in May 2011 with a B.S. degree in Biological Medical Sciences. While at SIUE, Kimber was an LSAMP scholar and was mentored by Dr. Steven McCommas, professor of Biology. Kimber is a first year medical student at Kirksville College of Osteopathic Medicine (KCOM) in Kirksville, MO.





Simone Donnette Williams earned a B.S. degree in Integrative Biology from Southern Illinois University-Edwardsville in 2010. As an undergraduate, Simone participated as an ILSAMP scholar under the mentorship of Dr. Steven McCommas studying colon cancer incidence and dietary fiber intake. As an undergraduate student, Simone also participated in two

internships at the Donald Danforth Plant Science Center in St. Louis, MO in 2009 and at the University of Pennsylvania in Philadelphia, PA in 2010, studying G-protein coupled interactions of plant hormones and in allergic reactions respectively. She also presented and participated in a number of national conferences including the Annual Biomedical Conference for Minority Students and the Argonne National Symposium for Undergraduate Students. Simone intends to apply to graduate school for admittance in the fall of 2012.

Tracy Barnes earned a Bachelor of Science degree in Electrical Engineering in 2000 and Master's degree in Electrical Engineering in 2004 at Southern Illinois University at Edwardsville. He participated in the LSAMP program while pursuing both degrees at SIUE. He also worked as a test Engineer in St. Louis, MO, while pursuing his masters' degree. His interest



varied in the Electrical Engineering discipline, one main interest was how to harness the power of lightning to use as an energy source. Now he is an Electronics/Computer Engineering Professor at Hillsborough Community College in Tampa, Florida.



Diana Gutierrez is currently a third year Ph.D. student in Bioengineering. She received her Bachelor of Science in bioengineering with a concentration in cell and tissue engineering in 2009. Presenting her undergraduate research at the ILSAMP symposium gave her the opportunity to be appointed into the Bridge to the Doctorate fellowship

program. As a UIC undergraduate she participated in a series of Research Experience for Undergraduate (REU) Programs including the Continuing Umbrella for Research Experience (CURE) and the Nanoscale Science and Engineering Center (NSEC) at Northwestern University and the Illinois Institute of Technology Pritzker Institute for Biomedical Science and Engineering Center for Diabetes Research and Education. She is presently working on her thesis project in the Department of Surgery in collaboration with the College of Pharmacy. Diana is one of the authors of a publication in *Biomed Microdevices* (2011)DOI 10.1007/s10544-011-9580-0. PubMed.

Joshua E. Hernandez is in the final semester of his Masters of Science in Electrical Engineering at the University of Illinois at Chicago. His focus and passion lies in Signal Processing with a focus in Computer Vision. In his engineering career he has held internship positions ranging from a Data Analyst for Boeing's



Strategic Missile and Defense Systems to Boeing's corporate office of Network and Space Systems which leads 9 Billion in Revenue with 19,000 employees. He has been an I-LSAMP student since 2006 and the conferences have always been a key motivator for Joshua to achieve more in his technical curriculum.



Ruben Echevarria was always fascinated with math and science, but it was the Fermilab Target Program that convinced him to follow a STEM major while he attended Proviso East High School. Soon after the program, he attended the University of Illinois at Chicago and was accepted to participate in a 10 week, full-time summer NSF-funded Research Experience for

Undergraduate students. During the program he collaborated in researching the privacy issues with Vehicular Ad-Hoc Networks (VANETs) under the advising of Dr. Fu, which was later published. Although his intended field of study was engineering, Ruben was infatuated with teaching mathematics and pursued his gift of teaching. Currently Ruben attends Northeastern Illinois University, majoring in Teaching Secondary Mathematics, employed by NEIU as a math tutor, and is on the Dean's List.

LaTris V. Parrish graduated from Chicago State University with a B.S. degree in Biology and Minor in Chemistry in the fall of 2009. She is a proud parent of a daughter who looks up to her. As an undergraduate she completed research on Dye –Sensitizer Solar Cells by using ATR-FTIR Spectroscopy. She has presented her research at several conferences including the



239<sup>th</sup> ACS National Conference. In her spare time she volunteers at the local Children's Hospital. She plans to become a pediatrician. She currently works as a Quality Assurance Analyst at Venture Foods LLC Laboratory.



Oscar Perez always had an interest in science, but never envisioned himself as a scientist. He was particularly interested in genetics, and after excelling in his genetics course at Northeastern Illinois University, his professor suggested that he join her research group. Oscar's research team is investigating the genetic basis of a recently discovered link between excessive folic

acid supplementation during pregnancy and the subsequent development of autism in children. Oscar has presented his work locally as well as nationally at conferences, where he met new mentors and gained exposure to a wide range of options for post-graduate employment and study in the sciences. Oscar plans to seek employment in a laboratory, hopefully focused on the genetic basis of aging, and is considering graduate study in this field as well.

Angela Varela is a senior at Northeastern Illinois University. She plans to graduate this December with a Bachelor's Degree in Biology. Afterwards, she looks forward to applying for a Ph.D./M.D. dual degree program. Ever since she was a child, Angela's favorite subject was science. When she got older she knew that she wanted to work in the medical field. After spending the



summer working in a lab at NEIU, she decided that she wanted to pursue a dual degree so that she could eventually become a part of the biomedical research community while practicing medicine. "Research is something I always see myself doing. I like learning about things that no one else knows about just yet. It's exciting."



Yuvia Roman completed her B.Sc. in Mathematics from the University of Illinois at Chicago in 2007 and her M.Sc. in Mathematics with a concentration in Actuarial Science from Roosevelt University in 2009. Her experience serving as an undergraduate ILSAMP Scholar inspired Yuvia to continue towards an advanced degree in Mathematics which set

off a rewarding career applying analytics to commercial insurance. Days after graduation from her Master's program, Yuvia was hired at Allianz Global Corporate and Specialty where she currently holds the title of Regional Lead of Market Management Analytics.

Elizabeth Farias is currently a third year Architecture Student at the University of Illinois at Chicago. Once she completes her B.S. in Architecture in May 2013, she will be the first in her family to earn a college degree. During her first year, Elizabeth was part of Structural System class where she studied building facades, structural systems and designed an eco-friendly building.



Since then, Elizabeth has incorporated what she learned to further her designs. She was awarded a STEM scholarship during her second year for her participation in the Structural Systems class. She is currently in her third year and designing a proposal for Navy Pier in Chicago, IL.



Alejandro Rodriguez Jr. completed his B.Sc. in Computer Engineering Summa Cum Laude from the University of Illinois at Chicago in 2007. During his undergraduate career, Alejandro took on various internship and co-op opportunities with Dell, Inc. and IBM Corp. After graduation, he obtained employment with General Electric Healthcare participating in their Software

Technology Program working full-time while pursuing his M.Sc. in Computer Science at the University of Illinois at Urbana Champaign. In 2010, Alejandro completed his Masters in Computer Science and is currently working as Software Engineer at Chicago headquartered ACTIV Financial Systems, Inc.

Diego Fernando Freire Munoz graduated from the University of Illinois at Chicago with both B. S. and M.S. degrees in Computer Engineering. He realized STEM was for him in high school while taking Physics and Trigonometry. As an Undergraduate he was part of the ILSAMP Program and as a Graduate student he was part of the Bridge to the Doctorate Program. He now works for



the Doctorate Program. He now works for GE Health Care, Life Sciences Division located in Sweden and is part of the Edison Engineering Design Program (EEDP). The Edison program is geared at recruiting the best and brightest newly graduated engineers throughout the country. The program has allowed him to work in different parts of GE Healthcare including Uppsala Sweden. It has also given him extensive leadership and engineering training and experience.



Katrina Mosley graduated from Southern Illinois University Edwardsville in 2008, with a Bachelor's Degree in Biological Science. Katrina is currently studying dentistry at the University of Iowa, College of Dentistry, in Iowa City, Iowa. She is an active member of the Student National Dental Association and the Hispanic Dental Association, in which she participates in dentistry-related community service

throughout the state of Iowa. Katrina plans to practice General Dentistry after receiving a Doctor of Dental Surgery degree in the spring of 2014. In addition to working in private practice, she also plans to work in the Public Health field, providing dental health care for underserved communities.

Vieshia Roberts graduated with a dual B.S. Biological Science Psychology from Southern Illinois University at Edwardsville in 2010. While completing her undergraduate degrees, she was inducted into the International Honor Society in Psychology and was an ILSAMP scholar. She received numerous scholarships over her undergraduate career



including the Haley SIUE Scholarship for under-represented students in the sciences. She also participated in the Undergraduate Research and Creative Activities Associate Program and presented her senior assignment in cryobiology research at the Illinois Academy of Science Annual Meeting. She will receive her B.S.N. in 2012 and continue on to pursue the Doctorate of Nursing Practice Degree in Pediatrics and Midwifery.



Leah Page is a fifth year doctoral candidate in the Chemistry program at the University of Illinois at Chicago. Leah was awarded the Bridge to the Doctorate at UIC. She is an alumna of Southern A & M University in Baton Rouge, LA. Leah was awarded the Bridge to the Doctorate in 2007. Leah is completing her doctoral

research in the lab of Dr. Preston Snee where she is focused on the study of energy transfer in semiconductor nanocrystals (NCs).

Evelyn Nwabuisi is a sixth year doctoral candidate in the department of Anatomy and Cell Biology. Evelyn holds a Bachelor of Science degree in biology from the University of Illinois at Chicago. In 2006 she was awarded a Bridge to the Doctorate fellowship and became a member of the first B.D. at



UIC. Evelyn is completing her doctoral research in the lab of Dr. Mary Jo LaDu. The lab studies the structure/function interactions between apolipoprotein-E4, the primary genetic risk factor for Alzheimer's disease.



Lassandra Walker is a sixth year doctoral student in the Environmental and Occupational Health Sciences program at the University of Illinois at Chicago. Lassandra was a member of the 2006-2008 cohort of the Bridge to the Doctorate at UIC. She graduated from Chicago State University with a Bachelor of Science

degree and has since earned a masters degree as well. Lassandra has worked with Dr. Richard Novak with a general focus on HIV and more specifically on the characterization of the mucosal immune response of high risk seronegative women.

Hope Essien graduated from Chicago State University (CSU) with a Masters' Degree in Mathematics in summer 2003. He was supported by a NSF/CSEMS grant. His Masters' research project was on Continued Fractions. Hope earned a Bachelor of Science degree from Illinois Institute of Technology (IIT) in



Mathematics and minored in Computer Science. Professor Essien is now completing his doctoral degree in Education Leadership at Benedictine University, Lisle, Illinois. He served as the Chair of Mathematics at Malcolm X College for five years. He was elected as the President of Faculty Council, and Vice President of Faculty Council of the seven City Colleges of Chicago. One of the many academic presentations of Hope was presenting scholarly work at the International Conference on Technology in Collegiate Mathematics (ICTCM) titled Enhancing the T (Technology) in Mathematics to Contextualize Student Learning Outcomes and a presentation at the ICTM-2012 annual conference on Effect of Active Learning on Academic Proficiency for Community College Students Enrolled in Developmental Mathematics.



David Athens Weed is currently a sixth year Ph.D. candidate in Mechanical and Industrial Engineering at the University of Illinois at Chicago. David was awarded the Bridge to the Doctorate fellowship after graduating with a B.S. in Computers Science Engineering from UIC in 2006. David integrates the principles of

Mechanical Engineering and Bioengineering in his research. David is committed scholar always striving to be the very best that he can be toward becoming a contributing member of the global scientific community. A 2012 date is anticipated for the completion of his doctoral degree.

**Dr. Ogbonna Bowden** received his Doctorate of Dental Surgery from the University of Michigan in 2008, having previously acquired an undergraduate Degree in Chemistry with a concentration in Biochemistry in 2004 from Chicago State University. While at CSU, Dr. Bowden was an ILSAMP scholar and an Organic



tutor. His primary research focused "Understanding How Students Understand Physics." While at the UM, Dr. Bowden researched "The Role of Middle School Teachers in Oral Health Education and the Recruitment of Future Health Professionals". The research was presented at the International/American Association of Dental Research, 85th General Session and Exhibition in New Orleans, LA in 2007. Dr. Bowden decided to return to his community to provide Oral Healthcare to low-income and uninsured patients. He currently serves as the Director of Dental Services at Christian Community Health Center. Dr. Bowden is continually committed to finding efficient and effective ways to reach and provide oral health services to underserved populations.



Mercedes L. Gomez Jacobs is a junior pursuing a Bachelor's of Science in Geography and Environmental Resources at Northeastern Illinois University. Her area of specialization is Water and Climate resources. Mercedes is a native of El Salvador. In 2009 after being personally affected by widespread

flooding in the Chicago area and witnessing flooding in other parts of Northern Illinois, she took an interest in studying Environmental science at Northeastern Illinois University. Mercedes immediately had her interest in Geography sparked within the first semester at Northeastern in Chicago. One of her first research projects was titled "Science Education Reform-Bridging the gender gap in STEM fields". By the second semester she was eager to deepen her studies in understanding how the planet, the atmosphere and humans all work together. In fall of 2010 Mercedes found a new academic home at Southern Illinois University. During her time at SIUC Mercedes has worked on projects around campus including events with the Student Programming Council as well as tending the student organic garden. She has studied German and is working on attending a summer program in Freiburg, Germany next year that is based around Renewable and Sustainable Energy.



Raymond Batts graduated May 2004 with Bachelor's of Science in Environmental Biology with minors in Chemistry and Anthropology from Chicago State University. He was hired by Silliker labs as a Microbiologist in August 2005. He was promoted to Senior Microbiologist several years ago and ran his own department. Raymond was recently promoted to Quality

Assurance Specialist at the Corporate Office of Silliker in downtown Chicago. He has also attempted to start different businesses. Raymond indicates, "I am a busy, hungry individual for success and plan to go for my master's in microbiology. I am also in the preliminary stages of planning a project to change the face of the black community along with all other communities for the better of all that want success in life."

Chika Chima graduated from the University of Illinois at Chicago with a B.S. in Bioengineering concentrating in Biomechanics in 2010. Chika was an active participant in the African American Academic Network, ILSAMP Mathematics initiative and was a McNair Scholar. She is working at McMaster-Carr, an industrial supply



company, and is nearing completion of an alternative medicine course of study at the end of which she will become a doctor of chiropractics. She started conducting research her sophomore year in college and have presented research in more than 6 states nationally and at more than 15 conferences and research symposia. She realized that engineering was for her when she won a civil engineering bridge building contest in high school.



**Dr. Rashad Belin** is an alumnus of the University of Illinois at Chicago. After earning his Bachelor of Science degree, Rashad went on to complete a Ph.D. in the UIC department of Physiology and Bio Physics, in 2005. Rashad was a 2003 UNCF/Merck Graduate Fellow and an Abraham Lincoln Fellow. Rashad tutored medical students in physiology for the Urban

Health Program in the UIC College of Medicine. After the completion of his doctoral studies, Rashad finished a medical degree at the University of Chicago. Rashad is a specialist in internal medicine and is currently affiliated with Northwestern University Hospital.

Chelsea Franklin is a sophomore at DePaul University and a new ILSAMP scholar. After graduation she plans to attend the UCLA School of Medicine. Franklin realized her passion for biology in high school. She says, "I realized a career in science was right for me in my junior year of high school. I had a teacher



that opened my eyes to the world of biology and I loved it. Since then, I have been working toward my degree in Biology. I also plan to become an obstetrician-gynecologist one day and bring my practice back to the communities of Chicago that need it most." Her plan, she comments, begins with obtaining her undergraduate degree and research experience, and knows the ILSAMP program is extremely useful in helping her achieve that goal.



Natalie King is a fifth year doctoral candidate in the department Neuroscience. She was a fellow in the NSF-funded Bridge to the Doctorate program from 2007 to 2009. Natalie is an alumna of Oakwood University in Huntsville, Alabama where she majored in biology. Natalie works in the lab of distinguished UIC professor Dr. Mark Rasenick. The

focus of their research is Regulation of G protein signaling by the synaptic cytoskeleton; molecular basis of mood disorders and psychotherapeutics. Natalie anticipates that her doctoral research will be completed by 2013.

Kristin Ivy is a fifth year doctoral candidate in the department of Biochemistry and Molecular Genetics at the University of Illinois at Chicago. She was a member of the 2007 -2009 cohort of the Bridge to the Doctorate at UIC. Kristin is an alumna of Grambling State University (LA) where she majored in Biology and Psychology. Kristin has been awarded a NIH training grant and



works in the lab of Dr. Jack Kaplan. Research involvement: Structure-function studies, mechanism, biosynthesis, assembly and cellular trafficking of P-type ATPases or Ion pumps. Mechanism and Regulation of Copper transport systems in mammalian cells. Kristin is second author on a research publication with Dr. Kaplan.



Philip Adenaken is an alumnus of the University of Illinois at Chicago. He earned his Bachelor of Science in 2002 and went on to complete his Masters degree in 2005. As a beneficiary of the Illinois LSAMP, Philip is a focused and committed scholar with many achievements and awards to his credit.

Tenille Medley graduated from the University of Illinois at Chicago in 2007 with a Bachelors degree in Electrical Engineering. While at UIC, Tenille participated in ILSAMP activities via the Mathematics initiative. Tenille has gone on to work on a doctoral degree, in Electrical Engineering at Purdue University in West Lafayette, Indiana.





Tanganyika Wilder is a fifth year doctoral candidate in the department of Physiology and Biophysics at the University of Illinois at Chicago. She is a member of the 2007 -2009 cohort of the Bridge to the Doctorate at UIC. Tangy was an American Physiology Society Porter

Physiology Fellowship recipient in 2009 (and 2010), received Honorable Mention for the NSF Graduate Research Fellowship Program. Tangy says she fell in love with Anatomy and Physiology in the twelfth grade. She is a member of Dr. Ross John Solaro's laboratory. Her work investigates cardiac myofilament modifications as they alter the heart function in response to altered metabolic disturbances, specifically mechanisms involving AMP-Kinase.



Kara Scott received the B.S. in 2003 in Physics from Chicago State University. She received the M.S. in Mechanical Engineering in 2007 from Southern Illinois University Carbondale. Her research/faculty Advisor was Dr. Tonny Oyana. She investigated an improved K-means clustering algorithm for segregating

large geospatial data. The significance of improving clustering algorithms stems from an increasing demand for better visual exploration and data mining tools that function efficiently in data-rich and computationally-rich environments. Currently Kara is working for FEMA as a geospatial analyst.

**Dr. Kassandra McGehee Bosire** is an attending family medicine physician at Holy Cross Hospital in Fort Lauderdale, FL. She began her academic career on an athletic scholarship at Chicago State University while earning a B.S. in Biology in 1995. While at CSU she was active in student organizations and became associated with AMP. She went



on to work for Pfizer, Inc as a biological associate within the division of Safety and Development for approximately five years. She then went on to medical school at Wayne State University School of Medicine in Detroit, MI in 2001 and completed her residency in family medicine at The University of Michigan in Ann Arbor in 2008. She is board certified in family medicine and provides both in and out patient care for her rapidly growing practice for over the past three years.



Spencer A. McDuffy Sr. graduated Magna Cum Laude from Olive-Harvey College in 2005 with an A.S. Degree in Mathematics. While at OHC he was in Phi Theta Kappa and held several positions. He was also an ILSAMP scholar. Professor Austin Ferguson was one of his mentors for the ILSAMP

program at OHC. Spencer furthered his education at Governors State University where He continued his involvement with the ILSAMP program and graduated in 2008, with a B.S. Degree in Mathematics. He is currently an Adjunct Mathematics Professor at OHC where he teaches Foundational Studies Mathematics. He aspires to further his education in Mathematics and pursue his Ph.D.

Cleveland Eugene Rayford II completed his Master's in Mechanical Engineering at Southern Illinois University Carbondale in 2008, followed by a Master's in Biomedical Engineering in 2011, also at SIUC. He has won several awards, including the James Walker Presidential Fellowship and most



recently a research fellowship at University of Tuebingen, Germany. Cleveland is currently pursuing a degree in Clinical Radiation Oncology Medical Physics at San Diego State University. His career goal is to be a cutting-edge research professor and also own his own bio-imaging company to make health technology more available to all people around the world.



Ruanlly Santizo graduated from Northeastern Illinois University (NEIU) in 2010 with a B.S. degree in Earth Science, while working and being a full-time mother of three. A basic course awakened a serious interest in the earth sciences. Ruanlly realized that Earth Science was for her; she changed her major and continued this new

journey in the STEM field. She took the opportunity to do research and presented results at more than one NEIU Symposiums. Soon after, Ruanlly's professors talked to her about a new domestic internship offered by the Earth Science Department during the summer. She applied and was given the opportunity, and learned a lot about field work and collected valuable information that she later presented at the NEIU Symposium. The advisors provided the opportunity for many NEIU students (self included) to present their research at the SACNAS National Conference in Dallas, Texas. Ruanlly says, "The impact of NEIU in my life has been highly positive. Ruanlly was recently offered a volunteer geologist position for the Boyscouts of America. Ruanlly is currently preparing for the GRE, and plans to pursue a Ph.D.

**Dr. David Montgomery** is an alumnus of the University of Illinois at Chicago. He completed his undergraduate degree at Morehouse College in Atlanta, GA. David completed a Ph.D. in the UIC department of Physiology and Biophysics. During his doctoral study, David was a Mark R. Labrecht Award for Scholarship and



Commitment recipient, was an Abraham Lincoln Fellow, and placed 1<sup>st</sup> in the 2000 UIC Student Medical Research Forum. David completed a physician scientist training program and a cardiology fellowship at Northwestern University Feinberg School of Medicine. He holds a keen interest in academic medicine and is a practicing cardiologist affiliated with Northwestern University Hospital in Chicago, Illinois.



Ishtar Tarlise Bragg transferred to Chicago State University in spring 2011. She is majoring in Biology Secondary Education. Before attending CSU, Ishtar was a student at Olive Harvey community college under the mentorship of Professor Austin Ferguson. He introduced her to the

Illinois Louis Stokes Alliance for Minority Participation (ILSAMP). Through professor Ferguson's leadership and guidance I changed my major to Biology once I got accepted to CSU. After her first semester she applied for and received a Noyce scholarship. "I enjoy being a National Science Foundation Noyce Scholar and also being a part of Illinois Louis Stokes Alliance for Minority Participation program. Professor Ferguson is a great leader, mentor and professor. He made me realize my potential, and the importance of Science education." Ishtar also indicates that Dr. Jones and his staff have taught her the importance of education, leadership, and discipline. "Like Professor Ferguson would say, I believe in you! Do you believe in you? Yes, I do now because you believed in me first. Thank you!"



Kimberly Terrell was a Chicago AMP scholar (the precursor to ILSAMP) in 1996. She graduated with a degree in computer engineering from the Illinois Institute of Technology in 1998. She completed a Master of Science in Space Studies at the International Space University in 2003. She is currently

founder, chief executive officer, and principal of Katz International Management Solutions, LLC, and a technical project-management company with a NASA niche.

**Dr. Juan Garcilazo** completed the B.S., M.S., and Ph.D., in Civil Engineering at Southern Illinois University Carbondale. His research /faculty Advisor was Dr. Aslam Kassimali. His research Study included "Working on computational procedures that will efficiently and effectively analyze steel members and structures under elevated



thermal conditions." There is a need for a more general, practical structural analysis method for construction building under severe thermal conditions. A beam-column approach will be used to develop this practical analysis method. Dr. Garcilazo's future plans include starting a career as a structural engineer, and eventually obtain a teaching/research position at a college or university



Yoana Rosales received the B.S. degree in 2004 in Environmental Biology at Chicago State University and M.S. in 2007 in Organic Geochemistry from Southern Illinois University Carbondale. Yoana's research / faculty advisor was Dr. Ken Anderson. Her research included Reconstructing paleoenvironments and paleoclimatic

conditions to develop understanding how environments respond to climate change. The objective of this study is to determine the paleovegetation present in what is now Patagonia during Oligo-Miocene period, when South American was separating from Antarctica, by analyzing fossil plant resins (amber). Due to her outstanding performance as a first-year master's student, she was accelerated to the doctoral program of Environmental Resources & Policy. However, after learning that her current research may expose her unborn child to health risks, she withdrew from the doctoral program at the end of fall 2006.

**Dr.** Mekita Faiye received the B.S. degree from Illinois Institute of Technology, as well as a M.S. and Ph.D. from Georgia Institute of Technology. She was a Lucent Fellow and Motorola Fellow and published over 20 publications in her field and received numerous awards for her accomplishments including the



National Society of Black Engineers: Golden Torch Awards "Graduate Student of the Year".



**Trevor Townsend** is currently pursuing his Bachelor of Science degree in Mechanical Engineering at the Illinois Institute of Technology. An Illinois Louis Stokes Alliance for Minority Participation scholar, he is interested in mechanics. During the summer of 2010 he worked in the area of Robotics.

Dr. John Shell received the B.S. in 2002, M.S. in 2004 and the Ph.D. in 2008 all in Electrical Engineering at Southern Illinois University Carbondale, Carbondale, IL. His research/faculty Advisor was Dr. Nazeih Botros, Professor. His research involves modeling growth hormone and the effects of somatostatin, growth hormone releasing



hormone, ghrelin, and insulin like growth factor on hormones. A mathematical model consisting of four differential equations is developed and solved; then, a model is transposed to Hardware Description Language, verified for accuracy and then synthesized into logic. Dr. Shell has eight publications to his credit. Current he is on the faculty at the University of Wisconsin Milwaukee.



Alberto Quintana was a Chicago AMP scholar (the precursor to I-LSAMP) in from 1995-1996. He received his degree in Mechanical Engineering from the Illinois Institute of Technology in 1997 and a Masters degree in Engineering Management from Universidad Politécnica de Puerto Rico. He is currently President

of Alberto Quintana & Associates a Mechanical and Industrial Engineering company.

Melique Hoover received the B.S. in Physics in 2004 and the M.S. in Electrical Engineering, Southern Illinois University Carbondale, in 2009. His research/faculty advisor was Dr. Frank Gaitan, Associate Professor. His research study was designing numerical and simulating basic building blocks of a quantum computer or quantum



gates. Quantum computers are able to solve certain problems exponentially faster than traditional computers; however, they are sensitive to noise. It has been proven that quantum computers can overcome the noise barrier if quantum error correcting codes are used and the error of every gate is below a certain threshold. In the process of developing a complete set of gates with an error below 10<sup>-4</sup>, which is below the threshold for most noise models. Melique is currently in the doctoral program in Physics at SIUC.



Shaheerah Fateen was a Chicago AMP scholar (the precursor to ILSAMP) in 1996. She graduated with a degree in Chemical Engineering from the Illinois Institute of Technology and then completed a Master of Engineering in Civil and Environmental Engineering at MIT in 2002.



Jennifer Grandfield graduated from Illinois State University in 2011 with a Bachelor of Science degree in Mathematics Education. She was the proud recipient of the Robert Noyce Teacher Scholarship. She now teaches Math at Options Laboratory School which provides education for off track (at-risk) and high school students in

an arts and technology-based charter school, preparing students for a quality life in the 21st Century.

Jessica A. Garcia is an adult student working on a Bachelor Degree at Northeastern Illinois University, double-majoring in Biology and Secondary Education. Previously, Jessica worked at an after-school program as part of the team that helped build and plan the curriculum for the program focusing on math and science. In doing so, she noticed many



deficiencies in the adults who were supposed to lead the elementary school students in their new venture. This is when she realized what she wanted to do. She had taken science classes at the college level before, but they had not inspired her as this experience had. The following year she enrolled at NEIU and declared her biology major and was introduced to ILSAMP. The greatest achievement for Jessica and her team was presenting their research at the SACNAS national conference. Jessica says, "My research experience was enlightening and motivational. It introduced me to a part of science few have the opportunity to know." Since then, Jessica has progressed in the College of Education program.



Mackenzie Walker is studying Biochemistry and Molecular Biology at Illinois State University. Lisa Sczepura, Mackenzie's mentor, and she received a monetary award in 2010. Mackenzie has taken advantage of several programs offered by the ILSAMP. She hopes to attend medical school upon

graduation.

Richie Hickman graduated from SIUE in 1995 with a Master's degree in Chemistry. After graduate school, he worked at TEVA Pharmaceuticals USA as a chemist and manager in Analytical Research and Development. At TEVA Pharmaceuticals USA, he helped develop and bring to market generic drug products and



performed research and development on dozens of drug substances and drug products. Currently, he is the laboratory director for the Maryland Racing Commission Laboratory. He administers a drug testing program using various scientific methodologies and instruments to detect drugs and/or metabolites taken from competing horses and employees at racetracks within the state.



Jesse Vargas is a Ph.D. Candidate in Molecular and Cell Biology at the Salk Institute, UC San Diego, La Jolla, CA. He received a B.S. in 2003 in Molecular, Cellular and Systemic Physiology, University of California-Irvine, Irvine California. In 2007, Jesse completed the M.S. in Molecular, Cellular & Systemic

Physiology, as a Bridge to Doctorate Student at Southern Illinois University Carbondale. His work entailed characterization of gene activity and transcription factor target and function. In his doctoral studies, he spends much of his time at the Waitt Center for Advanced Biophotonics and he intends to continue with micro-imaging as a consultant or advanced scientist when he completes his doctorate in 2012.

Raul Rodriguez graduated from Illinois State University where he was introduced to the ILSAMP program. Raul found that his interest was in teaching. He, therefore, got a Bachelor of Science Degree in Mathematics Education in 2010. He is currently teaching Mathematics at Buffalo Grove High School in a suburb of Chicago after receiving his degree.





Chantel Hays Carson earned her B.S. degree in Electrical Engineering from the Illinois Institute of Technology (IIT) in 1995. Prior to IIT, she completed Chicago State University's Engineering Studies program with honors. As an undergraduate at Chicago State University, Chantel received two distinguished science internships at the

Massachusetts Institute of Technology (MIT). She has been employed at Underwriters Laboratories Inc. since 1996 as a product safety engineer of medical devices. She currently instructs manufacturers of medical devices globally how to design their products for compliance with international safety standards.

Cindy Selene Calderon is a second year Earth Science student at Northeastern Illinois University. She recently received an award for her participation in the SCSE Student Research Symposium for her work in the Rattlesnake Hills of Wyoming where she studied the petrology and geochemistry of the region over the



summer. After a Physical Geology class with Dr. Genet Duke, Cindy became interested in the STEM fields and the kinds of careers that involve geological work. Cindy is currently employed at O'Hare airport as a server and going to school at NEIU as a full time student. Cindy is the first generation in her family to attend college and feels she has to accomplish this for her parents and feels very proud to be a Hispanic woman working to get a degree in science.



Edgar O. Corona recently graduated from the University of Illinois at Chicago on May 8, 2011 with a Bachelors of Science in Mathematics and Double major in Economics with a minor in French. He also graduated from the Honors College on May 4, 2001 and was part of the President Award. When he

entered UIC, he was undecided on what major to take and took the general classes his first three semesters. Of the classes that he was taking, he enjoyed the math classes more. He joined the Society of Hispanic Professional Engineers. Being in the student organization helped him to get more involved in the STEM fields. He is currently working with a professor researching current economic data and analyzing the current economic trends. He will be forecasting how the economy will grow for the fourth quarter of this year and for all of next year.

Crystal Guzmán is a 4<sup>th</sup> year Ph.D. student in the Department of Ecology & Evolution at the University of Illinois at Chicago. In 2008, she graduated with a B.S. degree in Biology at the University of Illinois Chicago. Her concern for rapidly disappearing species-rich tropical rainforests led her to pursue a degree



within the STEM fields. This was made possible by organizations that assist underrepresented students like herself such as ILSAMP and Bridge to the Doctorate program. She now devotes herself to her research in experimental tropical restoration (Veracruz, Mexico) and volunteering with various minority outreach organizations such as Science Bowl and Society of Hispanic Professional Engineers (SHPE). It is her goal to continue to inspire tropical restoration and youth involvement in higher education by means of her own research.



Cedric Everett graduated from the University of Illinois at Chicago with a B.S. degree in Electrical Engineering after completing the Engineering Studies Program at Chicago State University. He is the Managing Director of Nu-Day Energy, LLC. NU-Day Energy LLC is an Energy Services

company serving customers in the Chicago market. As the Managing Director he is responsible for the strategic direction of the company as well as for overseeing its day-to-day operations. He is also a Certified Energy Manager and Electrical Engineer and has more than 17 years of experience in the electric and natural gas energy industry. He also received an MBA from Indiana University-Northwest.

Steve Idowu received a Bachelor of Science degree in Biology and Psychology from Illinois State University in 2008. Steve received a monetary award during the 2005-6 and 2006-07 academic year for his research activities. He was active with ILSAMP and Dr. Robert Preston was his



ILSAMP mentor. Currently Steve is enrolled in a Master's of Business Administration program at the University of Illinois at Chicago.



Barbara L. Maali graduated from Chicago State University as a Presidential Scholar in May 2008 with a B.S. in Biochemistry. Involved in ILSAMP during her studies at CSU, she conducted research and took on several leadership roles in student organizations. She is a fourth-year dental student at the University of Michigan in Ann

Arbor, MI. She currently serves on the executive board for the Student National Dental Association at U of M. Barbara received a scholarship from the Wolverine Dental Society for her work in school and commitment to underserved communities. Although the road has been long and arduous, Barbara's humbling beginnings never allow her to lose sight of her passion for dentistry and advocacy for the underrepresented populations.

Peter Alex Carrizales is currently a student at Northeastern Illinois University. Peter is pursuing a chemistry degree, a minor in biology, and finishing pre requisites for pharmacy school. Peter engaged in summer ILSAMP research with NEIU faculty in the Chemistry department, resulting in his coauthorship on "Nanoscale Comparason of



Light and Dark-Adapted States of Bacterial Photoreceptors." The aim of this project is to characterize the conformational changes red-light photoreceptors undergo during the absorption of a photon. By knowing the nature of photo-conversion of these proteins, researchers can use them as fluorescent markers. Peter has also served as the president of the chemistry club, and awarded on the dean's list for spring 2011 while working full time and doing research. Peter realized STEM was right for him when he thought about professional school and what it has to offer. He knew that he did not want his education to end at just a bachelor's degree, and is working toward admittance into a professional school.



Ivan DeJesus Reyes will receive his B.S. in Biology with a minor in Chemistry at the end of the fall 2011 semester at NEIU. Ivan received an Associate degree from Harold Washington College in Chicago, IL. before coming to NEIU. Ivan performed research on invasive species, and was invited to attend the SACNAS national convention on a travel

scholarship based on an abstract he submitted. In the fall of 2011 Ivan received a certification from NEIU based on research he conducted at the University of Illinois at Urbana-Champaign in conjunction with NEIU, the United States Department of Agriculture, and the NSF-ILSAMP. These studies gave him experience that assisted him in his research efforts during the summer of 2011, when he assisted Professor Adam Davis at UIUC with a damage niche study of two invasive species impacting Illinois agriculture. Working part time at a pharmacy gave Ivan exposure to the medicinal side of biology and chemistry that appealed to him, and therefore he has chosen to focus on these disciplines.



Jeff A. Carroll graduated from Illinois Institute of Technology with a B.S. degree in Mechanical Engineering in 1994. He was associated with ILSAMP at both Chicago State University and at IIT. Mr. Carroll is certified as an energy Manager by the Association of Energy Engineers and a chartered industrial gas consultant.

Jeff had experience in a number of successful positions before joining Siemens Corp. He started at Siemens in 2005 as the Senior Account Executive. In 2010 he became the City of Chicago Account Manager for Siemens Corp. His responsibilities include energy based solutions business development and order intake. His primary market focus is the City of Chicago, Cook County government, and State of Illinois Government location in Chicago. Jeff has received Corporate Partnership Awards from CHA's Windows of Opportunity and City Colleges of Chicago's Dawson Technical Institute and Black Contractor's United's Major Contractor of the Year.

Anita Ramirez is currently a doctoral graduate student in Mechanical Engineering at the University of Illinois at Chicago where she also received her Bachelor's in Science in 2004. Her focus is on heavy duty diesel fuel injection. Anita was involved in the ILSAMP program throughout undergraduate school participating as an Emerging Scholar,



Undergraduate research symposium, and as a Teaching Assistant. Anita was an intern at Caterpillar, Inc. throughout her undergraduate degree. Anita has received several fellowships during her time in graduate school. She has become involved in programs focusing on engineering education outreach such as the U.S. Department of Energy's National Science Bowl and serves as the coordinator for the regional competition. She looks forward to a career in post-secondary education sharing her love for science and increasing minority student opportunities.



Erika Sandoval graduated from the University of Illinois at Chicago with her B.S. in Industrial Engineering in May 2011. She is now working on her Master's of Science in Industrial Engineering. Her inspiration to pursue a career in the STEM fields came as her awareness of the great impact this area has

in society in general increased. As part of minority organizations she has realized that there is a need to increase minority participation in the STEM fields. She did her first research project under the vigilance from Professor David He. The Modal Test Analysis was to properly set-up the modal test analysis equipment supplied by Goodrich and to use the equipment to find the natural frequency of the bearing box. The tests will be done with different strike points and sensor locations to record the most accurate data. The results obtained from these sets of tests, will allow us to determine the failure conditions of the bearings. The Illinois LSAMP conference was a great opportunity to present research that can impact society and motivate other students to participate in more research projects.



Fernando Garcia-Perez completed his B.S. in Electrical Engineering from the University of Illinois at Chicago (UIC) in 2007. As an undergraduate he competed in the AMD Jerry Sanders Design Competition wining 1<sup>st</sup> place and other numerous design awards. In May of 2011, he obtained his M.S. in Electrical

Engineering from UIC with a focus in control theory. As a graduate student, he was also the recipient of the FMC Educational Fund Fellowship.

Cheryl Hyman began her higher education journey by enrolling at Olive-Harvey College, one of the institutions she now oversees. Transferring to Illinois Institute of Technology, she became involved with ILSAMP and excelled working with computer science faculty member George Smith to design laboratory tutorials on



programming language. She obtained a position running a computer laboratory at the Boys and Girls Clubs of Chicago, which inspired her to become involved in community service work. Hyman graduated with a B.S. in computer science on December 15, 1996 and began a career at ComEd that lasted for the next 14 years. From her initial position as a development analyst responsible for maintaining and enhancing nuclear-related legacy applications, Hyman advanced to external affairs manager, director of government and legislative affairs, and vice president of operations strategy and business intelligence. Along the way, she added to her academic credentials, earning an executive M.B.A. from Northwestern University's Kellogg School of Management and an M.A. in community development from North Park University. She is currently Chancellor of the City Colleges of Chicago.



Jorge Lightfoot will complete his Bachelor of Science degree in Biology with a minor in mathematics and physics in 2012 from Southern Illinois University Carbondale where he was an ILSAMP scholar. His interest in science began when he started working in an Immunology research lab on

campus where Dr. Vjollca Konjufca mentored him. Jorge began researching *Salmonella* pathogenesis and plans to continue this project into his graduate education.

Carlin Daniels graduated from Illinois State University in 2008 with a degree in Information Technology and Business Administration. Combining the two disciplines of his choice Carlin sought and found the perfect career position. He is excited to be an Account Manager at CDW, a company which is a leading



provider of technology for business, government, education, and healthcare in the United States and Canada.



Setor Kwame Akati transferred from Prairie State Community College to complete his undergraduate education at Chicago State University in August 2007, as a chemistry major. Setor was one of two students selected for the Faculty and Student Team (FaST) Program to engage in research at Argonne National

Laboratory under the mentorship of Dr. Asare Nkansah. He presented his research project both at Argonne and at the 2009 International Symposium on Alternative Energy. He was awarded the Presidential Scholars Award. Setor is currently a fourth-year pharmacy student at Chicago State University. He was awarded the College of Pharmacy Graduate and Professional Studies Award in April, 2011 for demonstrating an excellent academic scholarship while providing outstanding service to the Latino resource center. Also, he was one of five pharmacy students selected for the Federation of American Societies for Experimental Biology-Minority Access to Research Career travel award in May, 2011 which enabled him to attend the 2011 Experimental Biology Meeting. Setor is currently serving as a member of the College of Pharmacy Assessment Committee and liaison for his class. He will be graduating in May 2011 from Chicago State University with a Doctorate in Pharmacy.

Sunni Smith was an ILSAMP scholar at Illinois Institute of Technology from 2007-2009. He completed a Bachelor of Science in Electrical Engineering as well as a Bachelor of Industrial Technology and Management from the IIT. Energetic and affable, Sunni was very active in the National Association of Black Engineer's



program and often tutored pre-college students in summer programs. In addition to his work with students, Sunni was an ILSAMP research scholar. He is currently a Project Manager for Palladium Energy. The undergraduate research he completed while he was an ILSAMP scholar was a huge part of Palladium's decision to hire him. He was able to focus his career through his research experience. He plans to return to school for an advanced degree in 2012.



**Dr. Stephen M. Smith**, a native of Chicago, Illinois, graduated from Chicago State University in 2002 with a B.S. in Chemistry, where he was an LSAMP Scholar. Dr. Smith has participated in several research experiences that have run the gamut of the physical and biological sciences. As an undergraduate, he

performed Materials Science research in the laboratory of Tobin Marks at Northwestern University. After graduation, he studied Structural Biophysics with Tom Alber at the University of California, Berkeley. Dr. Smith recently finished his Ph.D. in Inorganic Chemistry at Northwestern University in the laboratory of Amy C. Rosenzweig. His graduate research focused on the biological oxidation of methane by the metalloenzyme particulate methane monooxygenase. Stephen is currently a Senior Applications Development Scientist with the Dow Chemical Company.



Geraldine Cochran is a second-year doctoral student at Florida International University. She graduated with honors from Chicago State University with a B.S. degree in physics and a B.S. degree in mathematics. After serving as a volunteer science tutor and substitute teacher in the secondary school system, she went on to

earn a M.A.T. as well as certification and licensure as a secondary school teacher in science and mathematics. While completing her M.A.T. degree Geraldine was mentored by both Dr. Mel Sabella and Dr. Kim Coble. Geraldine worked with Dr. Sabella in the area of physics education research. Their research has been published in the Conference Proceedings of the Physics Education Research Conference, published by the American Institute of Physics. Geraldine's work with Dr. Coble is in the area of astronomy education research. Their work has become a part of a larger project to develop curriculum for introductory astronomy courses, and their work has been presented at several national conferences. Geraldine currently serves as a member of the Committee on Minorities for the American Association of Physics Teachers and will be serving as the Vice-Chair of that committee 2012-2013.

Chevon Marsh graduated with a B.S. degree in Biology from Governors State University in 2010. During the summer of 2007 she participated in the Faculty and Student Teams (FaST) Program at Argonne National Laboratory under the mentorship of Dr. Mary Carrington of Governors State and Dr. Mike Miller of



Argonne. Her research was on colonization of tall grass prairie plant roots by arbuscular mycorrhizal fungi. Chevon plans to finish her Masters degree in Environmental Biology at Governors State University.



Shantelle William's decision to pursue a career in science stemmed from her wanting to be a well-rounded person. In 2010 she received a B.S. in Biology from Governors State University. During her participation in the Faculty and Student Teams (FaST)

Program 2008 at Argonne National Laboratory (the highlight to her college career), she worked on research involving the association between mycorrhizal fungi and three Illinois prairie plant species. She currently is searching for a job in line with her degree.

Sofia Galarza is a computer science major at Governors State University. During the summer of 2011 she participated in the NSF ILSAMP Faculty and Student Teams (FaST) Program at Argonne National Laboratory under the supervision of Dr. Xueqing Tang of Governors State University. Her research



was on data migration of Environmental Quality Information System (EQuIS). In the future she plans to pursue a Masters degree in Computer Science.



Jessica Dominguez is a third year Biology student at Northeastern Illinois University and is the president of the SACNAS Chapter and Secretary of Student Government. Jessica has conducted research on eve morphology of the praying mantis through SCSE and the Biology Department. She has presented her research at conferences throughout the country including at the

Entomological Society of America Conference in San Diego, CA. Jessica realized that the STEM disciplines were for her when she first started doing research with Dr. Prete on the visual algorithms mantis' use to define objects as prey. Presenting her research at a National Conference gave her the confidence that scientific research is for her.

Francisco Lagunas is working towards a B.S. in Chemistry at Northeastern Illinois University (NEIU). He is a Distinguished Graduate from the non-commissioned officer academy during his service to the United States. Francisco realized a STEM degree was for him after working on the F-117A Stealth Fighter while serving in the United States Air Force. Frank was able to conduct



research on "Nickel Catalyzed Boron Nanostructures" which lead not only to an opportunity to present his results at the SACNAS national conference, but also the results of the research was peer reviewed and published in the University of Illinois Journal of undergraduate research.



Yaiyr Astudillo-Scalia is currently a third year Northeastern Illinois student pursuing a B.S. in Biology with a minor in Music. Her intention is get a Masters Degree and conduct research in Marine Conservation and tie her music background to the study of underwater acoustics of dolphin and whale communication. Growing up in Venezuela near the ocean grabbed Yaiyr's interest in

marine mammals and the ocean in general. When Yaiyr moved to Chicago she became a volunteer for the Marine Mammals Department at the Shedd Aquarium. Yaiyr's research at NEIU involves a collaborative work of Professors in the areas of Ecology, Plant Science, and Genetics. They are in the process of creating a protocol based on DNA sequencing of three cattail species present in the Great Lakes region, in order to be able to differentiate the native species from the invasive species.

Nelson Gonzalez is currently enrolled at Northeastern Illinois University and is expecting a bachelor's degree in Biology in spring of 2012. Nelson was chosen to be part of a summer research program funded by the Collaboration and Retention in Environmental and Agricultural Research (CREAR), a USDA grant. Nelson gained experience in the lab performing DNA amplification and



sequencing and had the opportunity to engage in consensus work in the field. Upon completing his research this summer, Nelson sent an abstract to SACNAS. Nelson felt honored and privileged to have received a full travel scholarship to attend a national science conference in California to present his research. As Nelson prepares to depart from Northeastern, he says "I take with me all the guidance and support I have received from the Student Center for Science Engagement. They have provided me with the connections needed to be successful both in school and in life."



Jeffrey Thomas Havey is a recent graduate of NEIU. Jeffrey received his Bachelors in Science in Earth Science with a minor in Chemistry in 2011. In the summer of 2010 Jeffrey conducted a research project with the Student Center for Science Engagement studying the First Flush Phenomenon of the Chicago River. The results of the study were presented at the SACNAS National

Conference in Anaheim, California. This past summer Jeffrey worked with the National Park Service as a Fire Effects Monitor in Oklahoma, Texas and New Mexico. He monitored a wide variety of vegetation and fuel plots. This consisted of identifying grass, shrub and tree species. He looks forward to the future and is excited to discover what it holds.

Christian Meissner is a Northeastern Illinois student who received a Bachelor Degree in Biology. Prior to graduation, Christian participated in a summer research project experience by working under the supervision of a Department of Biology faculty member. The focus of Christian's research was determining the mechanistic and molecular details of reversible



photoconversion of photoreceptors in a bacterial species, *Rhodopseudomonas palustris*. Christian said, "The STEM research opportunity at NEIU was a great experience and I highly recommend it to science majors who desire additional learning experiences and challenges outside the classroom as well as professional career advice and graduate school preparation."



Candace Antoinette Maurice completed a Bachelors of Science in Computer Science at Northeastern Illinois University, and is currently working towards a Master's Degree in Computer Science. Candice was on the Dean's List multiple times while at NEIU. Candice realized that science was a fit for her when she took her first programming course. Candice said "I had no

previous experience with programming, and after writing my first program, I thought that it was a great feeling to be able to produce something useable from code that I had written. Ever since then, I have been pushing myself to do things that I would have never done before with technology." Candice has been able to gain real world experience through an internship at Northeastern. Candice is currently working at Northeastern in the Marketing Department as a web specialist.

Christopher Lee Toni is currently a Ph.D. student in mathematics at the University of California, Santa Cruz. He attended William Rainey Harper College for his associate degree in mathematics, and transferred to Northeastern Illinois University to complete a B.A. in Applied Mathematics. During his time at NEIU, he received the PLTL leadership award.



was on the CAS Dean's List, received awards for presentations given at NEIU and the Illinois Sectional Meeting of the Mathematics Association of America, and was awarded the Bridge to the Doctorate fellowship through UCSC. Mathematics was never really a passion of his until it clicked for him one day during an algebra class in high school. He is working with Dr. Marian Gidea on a central configurations problem in celestial mechanics and a project by Dr. Richard Montgomery at UCSC dealing with symplectic reduction for the three body problem.



Aldo Aguirre is a Ph.D. Candidate in Mechanical Engineering at the University of Illinois at Chicago, where he conducts research on Universal Design & Assistive Technologies under the direction of Prof. Michael J. Scott. His Ph.D. studies have been conducted in close collaboration with the NIDRR Rehabilitation Engineering Research Center on Interactive Exercise

Technologies & Exercise Physiology for People with Disabilities (RecTech). Mr. Aguirre was a recipient of the prestigious Gates Millennium Scholarship in its inaugural year (only 20 recipients per state out of over 50,000 applicants nationwide). He attended Kettering University in Flint, Michigan. He graduated Kettering University in 2005 in the top 10% of his class with a B.S. in Electrical Engineering and a B.S. in Mechanical Engineering. His academic achievements at Kettering include Outstanding Academic Performance, the Dean's List, Pi Tau Sigma and Eta Kappa Nu (National Engineering Honor Societies), Tau Beta Pi, and Kappa Mu Epsilon (National Mathematics Honor Society). He is also an active member of Society of Hispanic Professional Engineers, and has served on the Executive Board of SHPE. He received a M.S. degree in Mechanical Engineering from the University of Illinois at Chicago in 2007.

Nkechiyere Nwani received a B.S. in Molecular and Microbiology from Chicago State University in May 2006. During her tenure at CSU she conducted research on an ILSAMP grant and was mentored by Dr. Devi Potluri; her research focused on elucidating the role of proline accumulation in the salt-stress response of various cultivars of sweet potato. She was



an active member of CSU's Biological Society and also served as vice-president of the Tri-Beta Honor Society (2004-2005). She is currently pursuing a Ph.D. in Cell Biology at Northwestern University and is scheduled to graduate in 2014.



Gino P. Corrales-Delgado is a current Computer Science major at Illinois State University. He is very excited to be a part of the institution and ILSAMP. He thinks that his Latino blood makes him step outside of the box more and challenge himself in every day of his life. He hopes to one day work for a multinational corporation as a System Analyst or Systems Developer.

**Dr. Nicole M. Jones** completed her B.S. in Biology at Chicago State University in 2005. While at CSU, she joined the laboratory of Dr. Juanita Sharpe as an undergraduate research assistant, and later as a technician. Nicole was a Fellow in the 2006 - 2008 cohort of the Bridge to the Doctorate at UIC. She is a glowing example of how the Bridge to the Doctorate is successful in identifying,



developing, and graduating well-trained independent scientists from underrepresented populations who become productive members of the global scientific community. In June 2011, she obtained a Ph.D. in the department of Anatomy and Cell Biology at the University of Illinois at Chicago, where the focus of her work was on molecular biological and electrophysiological characteristics of canonical transient receptor potential channels. Nicole has been appointed to a post-doctoral position and is active in a stem cell research initiative at the University of Illinois at Chicago.



Christelle Rushing completed a Master of Science degree in Microbiology and Immunology at the University of Illinois at Chicago in fall 2009. She is an alumna of the University of Florida and holds a B.S. in Microbiology and Cell Science. Christelle is a member of the 2006 -2008 cohort of the Bridge

to the Doctorate at UIC. Christelle was nationally recognized at the BET awards by Queen Latifa as a Covergirl UNITY up and coming artist award winner showing that BD fellows are not only intellectually gifted but talented and well-rounded as well. Christelle is working on a second graduate degree in Biostatistics at the University of North Carolina Chapel Hill.

Heather Bowen graduated from Illinois State University in 2007 with a degree in Chemistry. During her undergraduate years Heather was extremely active in student academic associations that increased her knowledge and enthusiasm for her chosen career. She was particularly involved in the American Optometric



Student Association, the National Optometric Student Association, and Epsilon Psi Epsilon, an optometry fraternity. She is also an optometry student ambassador, meeting with prospective students and helping out at school open house functions. She is currently working toward her career goal, and is enrolled in the Ohio State College of Optometry.



Emmanuel Ansong is a third year doctoral student. He joined the University of Illinois at Chicago in 2009 as an NSF-ILSAMP Bridge to the Doctorate fellow in the Pathology Ph.D. program in the UIC after earning a B.S. in Biology from Oakwood University in Huntsville, AL. Emmanuel works in the Yang lab and is supported by a NIH minority supplemental training grant for his research on characterizing

PLCE1 and its role in Esophageal cancer, and recently a Selenium based colon cancer prevention trial. Emmanuel's future goals include a career in translational research to aid in bridging the gap between basic research and the patients who benefit from it.

Thessicar Evadney Antoine is a Ph.D. candidate in the Department of Microbiology and Immunology in the College of Medicine at the University of Illinois at Chicago. Thessicar was a member of the 2008-2010 cohort of the NSF-ILSAMP Bridge to the Doctorate at UIC. She is an alumna of Oakwood University and graduated Cum Laude with a Bachelor of Science degree in



Biology. Thessicar earned the UIC Bridge to the Doctorate Academic Achievement Award and is a published co-author: Glycoprotein Targeting As an Antiviral Therapeutic for HSV (in press). Thessicar is co-founder of the UIC / James Jordan Boys and Girls Club Science Initiative teaching science to middle school students in the inner city of Chicago.



Chasity Love is pursuing a Doctoral degree in Chemistry at Purdue University where she serves as a Teaching Assistant. She completed her B.S. in Chemistry in 2009 at Southern Illinois University Carbondale where she worked with Dr. Lichang Wang. As an undergraduate her accomplishments include the Dean's List, High Academic Honors from the College of Science, (7

semesters), and working with the Illinois State Police Student Internship Program. Her awards include the 2008 Research-Enriched Academic Challenge (REACH) research assistantship, the 2007 Summer NSF-Research Experience for Undergraduate (REU) SIUC, summer 2007, the 2006 SIUC Edwardsville East St. Louis Center Exemplar of Success Award, and the 2006 Black Togetherness Organization Future Leader Award. She was a participant in the McNair Scholars Program and ILSAMP.

Neffer-Oduntunde A. Kerr is a biology major at Chicago State University. She has been active in the CSU Biological Society as well as Student Government Association, where she served as the Board of Trustees Student Representative for 2010-2011. In 2010 she was the recipient of the



Dr. Marian Wilson-Comer endowed scholarship. In 2009, as an ILSAMP scholar, Neffer was able to intern at Argonne National Laboratory's Chemical Sciences and Engineering Division. She also participated in the Chicago Partnership Training and Research Program for Health Disparities (CPTRPHD) in 2011 through Pritzker's School of Medicine at the University of Chicago conducting experiments for pulmonary research. Ms. Kerr has also worked as a research assistant in the Clinical Addictions and Research Laboratory at the University of Chicago Hospitals. Neffer plans to continue her education by pursuing the Juris Doctorate and Master of Public Health at The University of Illinois at Chicago in 2012.



Sarah Owusu is pursuing a doctoral degree in Physiology at Penn State University with funding. She completed her B.S. in Physiology in 2009 from Southern Illinois University Carbondale. While at SIUC she worked in Dr. Buffy Ellsworth Physiology lab where she learned immune histochemistry staining, beta galactosidase staining, frozen sectioning and paraffin sectioning. After

graduation she presented at the Endocrine Society Conference in Washington, D.C. She was a member of the McNair Scholars Program, the Endocrine Society, ILSAMP, the Pre-Medical Minority Enrichment Development (PMED) program, Saluki Peer Mentoring program, and served as a Physiology /Biology tutor. After completing her undergraduate work, Sarah attended the Post-baccalaureate Research Education Program (PREP) at the University of Alabama Birmingham.

Kristine Lynn, Kristine earned a baccalaureate degree from UIC. She also earned her Master of Science degree in Environmental and Occupational Health Sciences from the University of Illinois at Chicago in 2009. She is a member of the 2007- 2009 cohort of Bridge to the Doctorate at UIC Fellows. She is a recipient



of the Bridge to the Doctorate Academic Achievement Award. Kristine is currently working in an environmental initiative for the federal government.



Eboni Monique Perkins received her B.S. in Chemistry from Chicago State University in 2005. During her undergraduate study she participated as an ILSAMP scholar, a research assistant and a tutor for the chemistry department. Upon graduation, Eboni was awarded the NSF-ILSAMP Bridge to the Doctorate Fellowship at Southern Illinois University-Carbondale. While

working toward her degree at SIUC, Eboni was awarded the 2007 C. David Schmulbach Graduate Teaching Award for outstanding teaching. Eboni is currently progressively pursuing her doctorate in chemistry under the advisement of Dr. Colleen Scott.

Elizabeth Patterson is pursuing a doctoral degree in Integrated Biomedical Sciences at Ohio State University with funding. She completed her B.S. in Biological Sciences from Southern Illinois University Carbondale in 2010. As an undergraduate, her achievements included receiving the COS Scholarship for High Scholastic Achievement, the Dean's List, the



2009 First Place Outstanding Research Achievement Award, and the 2007 Harvey Fisher Award. She was a recipient of the 2009 Saluki Scholar Research Opportunity Assistantship and the 2008 Research-Enriched Academic Challenge (REACH) Award. Her memberships included the McNair Scholars Program, Alpha Lambda Delta Honor Society, the African Student Council, and ILSAMP.



Camilo A. Galofre completed his B.S. in Electrical Engineering in 2010 and currently working in his M.S. in Mechanical Engineering with a concentration in Mechatronics at the University of Illinois at Chicago. He is an active member of the Society of Hispanic Engineering and the Renewable Energy Team at UIC. Camilo was awarded the Stephen Boettcher Memorial Fellowship from 2003 - 2005 and Exelon Olefin

Fellowship from 2010 - 2011. While doing his B.S. in Electrical, he worked on research about an Automatic De Icing car System in which he led a group with integrity to achieve one of the best senior design projects in the department of Electrical and Computer Engineering, receiving recognition from faculty members. Camilo presented his project at the ILSAMP Conference and SHPE National Conference in 2010. Camilo's curiosity at the age of 8, always asking questions about how everything works and his excellent grades in the subjects of Math and Science in high school, led him to pursue a career in a STEM field.

Troy Hernandez is a Ph.D. Candidate in statistics at the University of Illinois at Chicago (UIC). He has earned bachelor's degrees in mathematics and philosophy and a master's degree in statistics at UIC. He was an ILSAMP Bridge to the Doctorate fellow from 2006-2008 and is currently a fellow in an NSF interdisciplinary research group studying computational transportation science at UIC.



Troy realized that a career in STEM was for him, with mentoring from ILSAMP faculty, while helping his fellow students in his undergraduate mathematics classes.



Cheavar Blair graduated from Southern Illinois University Carbondale with a B.S. degree in Biology and a minor in Chemistry in August 2010. Currently, he is pursuing a master's degree in Plant Biology at SIUC, studying plant biochemistry and molecular biology with Dr. Andrew Wood. As a teaching assistant, Cheavar's ability to communicate articulately

and relate to his students has earned him invitations from other professors to speak to their classes about the merits of earning a STEM degree. Born and raised in Jamaica for 10 years, Cheavar is the first in his immediate family to graduate high school and college.

Adrienne Eastland is currently a thirdyear Ph.D. candidate studying biology at Northwestern University, Evanston, IL. She graduated *summa cum laude* from Chicago State University in May 2008 with a B.S. degree in Chemistry. While at Chicago State University, Adrienne participated in the Summer Faculty and Student Team (FaST) Research Program



at Argonne National Laboratory; peer-tutored Chemistry as part of Project RESKUE; and was named a 2007-2008 UNCF Merck Undergraduate Scholar. As a CSU MBRS-RISE student, she presented research at The Annual Biomedical Research Conference for Minority Students (ABRCMS), Anaheim CA, November 8 – 11 2006; The 19th Annual Illinois Student Research Conference, Western Illinois University, Macomb, Illinois, March 28-9, 2008; and The 11<sup>th</sup> Annual Illinois Louis Stokes Alliance for Minority Participation Student Research Conference, Oakbrook, Illinois, February 27-28, 2009.



Phillip Woods is currently a junior at Southern Illinois University Carbondale, majoring in Biological Science. Phillip works in the research lab of Dr. Eric Gato, studying DNA extracted from rats. In addition to his science studies, Phillip is an active leader on the SIUC campus, serving as a mentor in the Future Scholars program and Multicultural Advocates for Science

Success (MASS). Mr. Woods is preparing to take the MCAT.

Raquel Brown completed her B.S. in Biological Sciences in May 2009. While at SIUC her accomplishments included earning 1st place in the 2009 SIUC Undergraduate Research Forum, attending the Annual Biomedical Research Conference (2008) and Experimental Biology Conference (2009). Raquel was a member of ILSAMP, the



McNair Scholars Program, the Pre-Professionals Program, and the Black Women Task Force. Raquel is now pursuing a Master's degree in Physiology from Southern Illinois University Carbondale where she serves as a Teaching Assistant. She continues to work with her mentor Dr. James Maclean.



Nicole Shanti Broughton completed her B.S. in Biological Sciences with a minor in Chemistry in 2009 at Chicago State University. While attending CSU, she was accepted into the ILSAMP, where she conducted research as a part of numerous grants. Her research findings were presented in poster format at the 11<sup>th</sup> Annual ILSAMP Conference and many

oral presentations at the university. In the summer of 2008 at Arizona State University she conducted avian research as a part of their Research Experiences for Undergraduates (REU). The results were presented orally. In the fall of 2009 she continued research in a Post-Baccalaureate Research Education Program (PREP) at Arizona State University. There she was given the opportunity to do research at the Translational Genomics Research Institute (TGen) a non-profit organization focused on developing earlier diagnostics and smarter treatments and at Arizona State University neuroscience laboratory.

Karie Stewart is enrolled in the Nursing Midwifery Program at the University of Illinois in Chicago. She earned a Master's Degree in Public Health in August 2011 from Southern Illinois University Carbondale. While in graduate school she served as a Teaching Assistant for Health Education. She graduated with a B.S. degree in Biological Sciences in May



2008. As an undergraduate her accomplishments included the ILSAMP Program, the McNair Scholars Program, and the Transfer Science Student Scholarship. She was a member of the Parents on Campus Association; Black Women's Task Force; Pre-Professional Association; Students Promoting Educational Advancement and Research (S.P.E.A.R) and served as an Abundant Health Clinic volunteer.



Deborah Amos is a fourth year PharmD Candidate at Purdue University College of Pharmacy. She completed her Bachelor of Science degree in Chemistry at Chicago State University. While at CSU, she was awarded the UNCF-MERCK 2006 Undergraduate Fellowship. Under the fellowship she spent two summers at

MERCK & CO., Inc studying organic and biocatalytic compounds. Deborah coauthored a paper in the *Journal of Molecular Catalysis B: Enzymatic* entitled Preparation and application of cross-linked aggregates of chloroperoxidase with enhanced hydrogen peroxide tolerance. During Deborah's academic tenure at Chicago State University, she participated in various clubs and organizations as well as community service events. She is most well-known as the co-founder of the Chicago State University Pre-Pharmacy club and she served as president. Deborah Amos authored an article entitled Warfarin Therapy located in *St. Elizabeth Regional Health Sisters of St. Francis Health Services*. She was also awarded two grants from Purdue University, one of which was used to fund a diabetes education class to underserved patients and their families. She is awaiting graduation May 2012.



**Tiffany P. Brown** received her B.S. in Chemistry from Chicago State University in 2009, where she was an ILSAMP scholar, researcher, and tutor. She also received the President's Cup, which is given to the most outstanding graduating senior of the university. While at CSU, she was one of the 16 students nationwide to receive the

UNCF-Merck Undergraduate Research Fellowship where she performed research at Merck in Boston. Currently, Tiffany is a third year in the PharmD program at CSU where she was awarded the NACDS national pharmacy student scholarship that recognized community service and academic achievement. Tiffany is a motivational speaker for Polished Pebbles and Girls 4 Science. She will be a practicing pharmacist in 2013 and aspires to start a scholarship fund for promising youth.

Diana Nicole Darden – After graduating from Illinois State University in 2006 in computer science (web design) Diana has excelled as an accomplished IT Professional. She has over five years of professional experience managing strategic, high profile, revenue generating projects and initiatives for the Internet Account



Center and Internet Acquisition teams at Discover Financial Services. She is also currently Chief Marketing Officer of Koala Deal, a personalized daily deal Internet start-up, where she leads a marketing team implementing the company's marketing strategy. Diana is currently working toward her Masters of Business Administration at Northwestern University's Kellogg School of Management in Marketing and Entrepreneurship.



Renee Lopez Smith is a Ph.D. student in Plant Biology at Southern Illinois University at Carbondale, where she completed a Masters degree in 2008 as a ILSAMP Bridge to Doctorate Fellow. Her research considers the structure of the motile gametes (sperm cells) of ferns and how their structure relates to swimming and fertilization. This interest

was awakened when she grew a fern from spores in an introductory biology course. As a GK-12 Fellow, Renee worked with the online award-winning program, *Planting Science*, to introduce spores to the teaching repertoire that included only seeds.

Stephanie "Leah" Stokes was awarded a Master of Science degree from the department of Environmental and Occupational Health Sciences at the University of Illinois at Chicago in 2009. Leah is a member of the 2006 – 2008 cohort of the ILSAMP Bridge to the Doctorate at UIC. Leah has a firm commitment to the



well-being of society and is currently working as a public healthcare professional in New Jersey.



Dominique Tucker is a junior in Biomedical Sciences at Southern Illinois University Carbondale with an emphasis on Physiology. She is a math tutor, Future Scholars program leader, and very active in Multicultural Advocates for Science Success (MASS). Ms. Tucker became interested in science at an early age and is enthusiastic about every type

of lab work she has ever done; most recently she's conducted research under the supervision of chemistry professor Dr. Eric Gato. Her career aspirations include working toward a cure for sickle cell anemia.

**Dr. Gretcher Flohr** received a doctorate in Zoology from Southern Illinois University in 2010 with help from an ILSAMP NSF Bridge to the Doctorate Fellowship. She was the first to identify cytrids as an important pathogen responsible for declining amphibian populations worldwide. Dr.



Flohr is the author of over 20 publications on amphibian biology and ecology. Gretchen runs her own business in California as a biological consultant.



**Deidra Denise Davis** received her B.S. in Biology from Chicago State University in 2009. While at Chicago State, she was an ILSAMP scholar conducting research in plant biology. Deidra presented the collaborated research in 2008 at the 105<sup>th</sup> American Society for Horticultural Science Annual Conference in Orlando,

Florida. In 2009 Deidra was accepted to Southern Illinois University as a Master's student. As a graduate student, Deidra was awarded 1 of 3 scholarships from the Diversifying Faculty in Illinois Higher Education Program (DFI) as well as receiving an honorable mention from National Science Foundation Graduate Research Fellowship Program (NSF-GRFP). Deidra anticipates graduating with a Master's degree in Geography & Environmental Resources in May 2012. Following graduation she plans to pursue a doctoral degree in Environmental Resources & Policy at Southern Illinois University in 2012.

Alan O. Burts obtained his B.S. in Chemistry from Chicago State University in 2009, where he conducted fuel cell research with Dr. Asare Nkansah. After graduation, he accepted a Post-Baccalaureate Fellowship from the National Institutes of Health to work under the advisement of Nobel Laureate Prof. Robert H. Grubbs at California Institute of Technology. Under the supervision of Dr.



Jeremiah A. Johnson, he synthesized novel bivalent bottle brush polymer drug conjugates. Alan is currently working toward his Ph.D. at Massachusetts Institute of Technology.



Crystalann Jones-Thompson received a B.S. in Chemistry in 2008 from CSU where she participated as an ILSAMP scholar and an American Chemical Society Scholar. She was also a recipient of the American Chemical Society Analytical Chemistry undergraduate award. After graduation, Crystalann was awarded the Bridge to Doctorate fellowship to pursue her goal of gaining a Ph.D. in Organic Chemistry. Crystalann is currently a 4th year

graduate student at UIC where she was awarded an NIH grant for her work on pharmaceutical precursors and her research on synthesis of semiconducting polymers. She received funding from the American Chemical Society and from NSF.

Oscar M. Ramirez found out about a program that helps underrepresented students conduct research in science, math and engineering (ILSAMP) during his third year of college at the University of Illinois at Chicago. That year, he contacted a professor that was involved in the program and she gave him the opportunity to conduct undergraduate research in her laboratory. He



was so fascinated with the research that the following year, he applied to the graduate school to continue with the research. Without the program, he would not have considered going to graduate school. He now holds a Master of Science in Biological Science. He does not currently work in his field, but is planning to go back to school next year to pursue a doctorate degree. He definitely has the essential tools to achieve this goal and ILSAMP provided him with the resources. He is currently running a family business, but is planning to go back to what he likes the most; conducting research in science.



Tyvette Hilliard graduated with honors from Chicago State University in 2007 with a B.S. in Biology and a B.S. in Chemistry. As an undergraduate, she was an ILSAMP scholar. She was a member of the 2007 -2009 cohort of the Bridge to the Doctorate at UIC. Tyvette is a fourth year doctoral candidate in the department of Medicinal Chemistry at the University of Illinois at Chicago.

She currently works in the lab of Dr. Joanna Burdette investigating the role of the gonadotropins on ovarian surface epithelium and ovarian cancer as a focus of her doctoral thesis. Tyvette is the coauthor of 4 research publications and the 1<sup>st</sup> author on a publication entitled Glycogen synthase kinase 3 beta inhibitors induce apoptosis in ovarian cancer cells and inhibit in vivo tumor growth published in Anticancer Drugs in August 2011.

Cortez Carl McBerry is in the last year of his doctoral work at the Cincinnati Children's Hospital Research Foundation, University of Cincinnati. He received a B.S. in 2005 and M.S. in 2007 from Southern Illinois University in Microbiology. His work on the effectiveness of a protein in enhancing the immune response as an undergraduate and ILSAMP Bridge to



Doctorate Fellow inspired him to pursue a career in immunology. Before he joins faculty ranks, he will seek a post-doctoral position to continue his studies.



Christian Torres graduated from the University of Illinois at Chicago in 2008 with a Bachelor in Liberal Arts and Sciences majoring in Biology. She was involved in many student organizations at UIC such as the Society of Hispanic Professional Engineers (SHPE), Confederation of Latin American Students (CLAS), and Biology Colloquium where she was a Student Leader and Research Coordinator. Since high school, she was always interested in biological sciences but

it wasn't until she participated in a molecular biology research project where her interest for this field sparked. She attended two ILSAMP Conferences that helped her meet other students and professors. Participating in these conferences further engaged her interest in the molecular biology field. She is currently working at Northwestern University as a Research Technologist for the Department of Cell and Developmental Biology.

Joshua Jones is pursuing a B.S. in Mathematics the University of Illinois at Chicago. He has been conducting research in the Laboratory of Integrative Neuroscience at UIC. Presently, he is involved in novel investigation of the effect of atypical antipsychotics in a mouse model of Autism Spectrum Disorder. He also participated in research at Washington University in St. Louis



during summer 2011. He has coauthored two manuscripts, with one currently submitted for publication. He received the Herbert Alexander Award from the UIC Mathematics, Statistics, and Computer Science Department for achievement in mathematics and research. He realized STEM was right for him in 2010 during an intense summer of research. During that summer, he was able to grasp the lifestyle and the rewards of research, and he knew he wanted to continue in scientific research from that point. ILSAMP has tremendously supported his efforts throughout his research endeavors. He is applying to graduate programs, where he plans to conduct research in computational biology.



Yolanda McGehee Jordan graduated as a Presidential Scholar with a B.S. in Biology-Secondary Education) from Chicago State University. In 2000, she obtained her M.A. in Educational Leadership from CSU. Yolanda has worked as a high school science teacher and consultant for Illinois Institute of Technology and AT&T (Chicago Archdiocese and Chicago Public Schools). She also served

as the ILSAMP Science Outreach Coordinator at Chicago State University for 5 ½ years before returning to K-12 education as a science teacher and high school dean. Currently, Yolanda is an assistant principal at a high school in the suburbs of Chicago and is working on her doctoral degree in Administrator Leadership for Teaching and Learning at Walden University.

Antwuan Donley is currently a senior undergraduate student working toward a B.S. at Southern Illinois University Carbondale. His major concentration is in Chemistry. Antwuan has conducted undergraduate research in the lab of Dr. Jay Means, the College Dean.





Pablo E. Guzmán graduated from Chicago State University with a B.S. in Chemistry in May 2006. As an undergraduate, he served as an MBRS and ILSAMP scholar and was mentored in research by Dr. LeRoy Jones. In 2007, Pablo began his graduate studies at State University of New York at Buffalo as an

NSF Bridge to the Doctorate Fellow. After completing his M.A. in Chemistry, Pablo moved to Atlanta, Ga. where he is a fourth-year Ph.D. candidate in Organic Chemistry at Emory University.

Tolani Olagunju graduated from Illinois State University in December 2009. She was a biology major and chemistry minor and was a full participant of ILSAMP throughout her time of study in ISU. Tolani said the resources provided from the great network of students to the staff willing to mentor and help each other out, was a great integral part of her studies. She would



advise anyone to be a part of and take advantage of the program. The programs and seminars helped build a strong background that she used to start medical school.



Jason Henry is currently a senior at Southern Illinois University Carbondale, majoring in Plant Biology – he expects to graduate in May 2012. Jason is a Research-Enriched Academic Challenge (REACH) Award recipient and has done undergraduate research on stomata and the 'Liverwort Tree of Life' project with Dr. Karen Renzaglia, ILSAMP coordinator.

His interest in the structure and function of plant cells began in an introductory biology course, and his examination of the cell wall components of stomata in mosses will provide fundamental information on the origin and evolution of early land plants.

Sarah Lopez received her B.S. in Chemistry in June 2011 and will finish her M.S. in Chemistry at DePaul in 2012. While continuing her studies she is also serving as a research assistant at Rush University Medical Center in Chicago, conducting research on pigs to examine lung acoustics to create home monitoring systems. Lopez says her



involvement in ILSAMP and a similar program at DePaul, CIRRUS (Chicago Initiation for Research and Recruitment of Undergraduates in Science), contributed to her enjoyment and understanding of science and research. Lopez says of her ILSAMP experience, "ILSAMP is a great program because it is difficult to find means to get involved in research in these economic times were students need to work to support their studies. Furthermore, ILSAMP gave me the wonderful opportunity to travel abroad to Jamaica and the ACS National Meeting in California. Both of these opportunities have fostered my confidence in pursing science by giving me a well rounded view of different research areas. For instance, the coordinator of the Jamaica trip, Sandra Knight, proved to be a role model. I would like to study disease treatments similar to her work for the Centers for Disease Control." Lopez also founded the DePaul SACNAS chapter and served as president (2009-2011).



Narcrisha Norman is a doctoral candidate in Aerospace Engineering at Old Dominion University in Norfolk, Virginia. She received a B.S. in 2004 and Master's in 2006 in Mechanical Engineering at Southern Illinois University Carbondale, where she was a Bridge to Doctorate Fellow. During a 2010 summer internship through the Career Exploration Program at NASA, she worked on model

simulation and development, while simultaneously developing the education outreach program for Johnson Space Center's premier robotics initiative, Project M. Narcrisha believes that inspiring others to pursue STEM degrees is just as important as her own engineering work, and after completing her doctorate, she looks forward to conducting more research for NASA and eventually to teaching engineering at the university level.

Noelle Wakefield is a fifth year Ph.D. candidate at Northwestern University in Evanston, IL. She graduated magna cum laude from Chicago State University with a B.S. degree in molecular and microbial biology. Under the direct mentorship of Dr. Ache Gana, Noelle presented research at ILSAMP conferences. She obtained a prestigious undergraduate fellowship from



the Society of Plant Biology as well as a full academic Scholarship from the Krebiel foundation. While obtaining a Ph.D. at Northwestern University, Noelle is currently being supported by a Graduate research fellowship from the National Science Foundation. Noelle is completing her studies and looking forward to her impending career as a research scientist.



Calvin L. Williams earned a B.S. in Biological Sciences from DePaul University in 2007. Calvin indicates "My Ah Ha moment came when I began actually working in the laboratory alongside Dr. Margaret Silliker, my faculty sponsor in the DePaul ILSAMP Scholars Program. As I began to understand more and more of what was going on with my research, and felt my mentor's

trust expand, a funny thing happened -- I began to grow as an intellectual. And the confidence I felt from that day has fueled me, ever since. My life was forever changed because the research funds allowed me to participate (as I needed to work to pay for school). The program allowed me to foster a mentor/student relationship, and the created bond was strong enough to secure my confidence. Calvin is a 3<sup>rd</sup> year student of Harvard Medical School. I am working towards my M.D. and am set to graduate in the year 2014."

LaDonna Watts graduated from Illinois State University in biology in 2010. She is currently working with the City Colleges of Chicago in their Office of Strategy and Institutional Intelligence. While at ISU LaDonna was a member of the ILSAMP program. The ILSAMP program assisted her with choosing the correct career path. The program provided her with mentors, staff,



faculty, and other students to share knowledge gave a profound effect on graduating and choosing the career path she is on now. ILSAMP serves a worthy cause and she beseeches everyone, if possible, to join and share the same experiences she had.



Gustavo Vilarete received a Bachelor of Science in Computer Engineering from University of Illinois at Chicago. He was awarded with the Minority Engineering Recruitment and Retention Program Outstanding Junior Award and also had the unique opportunity of being President of the Society of Hispanic Professional Engineers - UIC chapter. He realized STEM was for him when early at a

young age he opened a SNES game system controller. When it was not working he fixed it. His curious mind always wonders how stuff works and it ultimately made him want to become an engineer. He is currently employed as an Associate Electrical Engineer at ArcelorMittal while also pursuing a Master's of Engineering at UIC. He also hopes to complete an MBA degree and become a licensed professional engineer.

Jan Raphael Manzanillo Sagun graduated from the University of Illinois at Chicago with a Bachelors of Science in Electrical Engineering with Cum Laude Status and is currently pursuing a Ph.D. in Electrical Engineering through the ILSAMP Bridge to Doctorate Program. During his undergraduate years he interned as an IT at Applied Systems for four years where he



learned much about physical computer infrastructure and handling. Today, he is a graduate assistant under the College of Engineering, working for the Minority Engineering Recruitment and Retention Program. His awards include being on the Dean's List from 2003–2007, the Chancellor's Student Service Award, Student Leadership Award, Activities Honors Society Recipient, and SHPE Richard Dean Anderson Award for Ingenuity.



Hector Hugo Caicedo Angulo is currently working toward a Ph.D. in Bioengineering at the UIC under the direction of Dr. Scott Brady. His graduate work focuses on optimizing and using micro-scale devices that facilitate and boost neurobiology research. He has already worked on the development and improvement of microfluidic devices that use

brain slices as model to study brain function. During the summer of 2009, he was invited to be a visiting researcher at the Université Pierre et Marie Curie (UPMC) in Paris, France. This year (2011), he was invited to be the chairman of the Panel Discussion of the International Summer School on Biocomplexity at Bogazici University in Istanbul, Turkey.

Laura Ruiz Santamaria is an Industrial Engineering graduate student at the UIC, where she also received her Bachelor of Science degree. Her interest in Industrial Engineering arose from her enthusiasm for engineering and business. As an undergraduate student, Laura was the recipient of scholarships from UIC, ComEd, Xerox, Society of Hispanic Professional Engineers,



and Caterpillar. Laura has also been involved with SHPE and IIE (Institute of Industrial Engineers). She held board positions at both societies and earned a UIC Chancellor's Student Service and Leadership Award in 2009. Laura's research interests include the areas of optimization and quality control and reliability. Her research in the area of quality control was presented in the ILSAMP conference in 2010.



Lourdes Gonzalez is a student at the University of Illinois at Chicago majoring in Mathematics and French. She will graduate in December of 2011 and plans to She plans to attend graduate school in Mathematics. Lourdes did a semester as a Foreign Exchange Student in Paris, France at the Université de Paris IV La Sorbonne. She fell in love with France, everything from the art to the

architecture, the food, and the language. She received the President's Award at UIC and was recently awarded the Benjamin A. Gilman International Scholarship. She has always found Mathematics interesting. In fact she feels that this is the only subject that challenges her and stimulates her mind.

Maarcus Weathersby received a Bachelor of Science degree in Electrical Engineering from the UIC. Maarcus and his innovative senior team designed a "Frozen Pipe Monitoring and Prevention System." After attending the ILSAMP conference as a spectator in 2009, Maarcus and his team knew that the ILSAMP would not only help them garner public notoriety for their project but also help



sharpen their presentation skills for future events. The ILSAMP opened the doorway for Maarcus and his team to be invited to present at several other research symposia including the NAE Grand Challenges National Summit for Urban Sustainability where he competed against the nation's leading student engineer researchers in their fields. Presently Maarcus is an Engine Design Engineer for Navistar, Inc., a leading company in the United States in the trucking and transportation industry.



Ogonnaya Dotson-Newman received her B.S. in Environmental Science from DePaul University in 2004 and went on to earn an M.Ph. in Environmental Health from Loma Linda University School of Public Health in 2006. She now serves as the Director of Environmental Health at We Act for Environmental Justice, a community-based group providing environmental health and

justice programming for residents of northern Manhattan. Ogonnaya also sits on the Board of Women's Voices for the Earth, a group working nationally on issues that relate to women's reproductive health. Her "ah ha moment" came early in her undergraduate career while working on her Environmental Sciences thesis at DePaul – "I fell in love with the work that I was doing and realized that it needed to be "translated" for communities of color."

**Dr. Lara Gutierrez** received her D.O. (2002) from the Illinois College of Optometry, after earning her B.S. in Biological Sciences (1998) at DePaul University. She is currently employed at Pearle Vision in Chicago. She entered college and struggled through her first year biology classes. As she says, "Fortunately for me, DePaul had a program through ILSAMP that provided tutoring for minority students in the



sciences. This was of enormous help and I am very grateful that this was available to me." She and her research partner won second place in a National AMP conference for their research poster presentation. Dr. Gitierrez credits the AMP program for helping her develop relationships with who would provide recommendation letters and research experiences.



**Dr. Truvae White** attended Olive Harvey College from 2004-2006. Attending this college granted me an opportunity to focus with its small class sizes, in addition to receiving a better understanding of the sciences and math. In 2011, she received the Doctor of Chiropractic degree. She attributes success to the professors at Olive Harvey College. "The ILSAMP program provided me an opportunity in the sciences

and it will be devastating to take away a program that could help young people in achieving their goals." Having been a non-traditional student my entire time in college, programs like this definitely helps students who dream that they would one day become a physician, a nurse, an engineer, an accountant, an economist, or even a mathematics or science professor. It should not be because of the lack of funding that stops our up and coming leaders the [ability] to tap into the art and beauty of science and/or the skill of mathematics. This program is very important to the college and to the professors who work tirelessly to teach students.

Levenia A. Baker received the B.S. in 2005 from Alcorn State University, Lorman, Mississippi. The M.S. was awarded in Molecular, Cellular & Systemic Physiology from the University from Southern Illinois Carbondale in 2008. Her faculty Advisor was Lydia Arbogast, Associate Professor of Physiology. Research Study: Exploring reproductive endocrinology and the stages in cellular proliferation and differentiation.



Specific attention was devoted to the central role in signal transduction mechanisms that transmit mitogenic or differentiation signals from an activated receptor to intracellular mechanism. Levenia currently works for Pfizer Pharmaceuticals Biology Associate Research Scientist.



Michael Futrell Simelton received the M.S. degree in 2007in Manufacturing Systems/ Technology from Southern Illinois University Carbondale. His research/faculty advisor was Dr. Mandara Savage, Assistant Professor at SIUC. Michael was involved in studying "Utilizing Kano analysis model and quality function and deployment to identify factors affecting the retention rate of minority

engineering students." This is a quantitative study to offer solutions to a qualitative concern. The tool that will be used is a Six Sigma, a new paradigm that industry is using to drive variation and to learn of customer satisfaction. Michael got his B.S. in 2005 in Manufacturing Systems /Technology from Southeast Missouri State University Cape, Girardeau, Missouri. He currently works for Exelon Corp. as an IT Analyst.

Danielle Johnson graduated from Chicago State University with a B.S. in biochemistry May 2007. While at CSU she conducted and presented research on Alzheimer's disease. She has won the Acres of Diamond Award, a competitive national recognition for research. At CSU she was a Presidential scholar, American Chemical Society Scholar, ILSAMP participant and active student leader. Danielle is now a third year dental student at University of



Louisville. While in dental school, she is working on research in Implant Dentistry.



Deidra Felton graduated in 2004 with a major in food and nutritional science at North Carolina A&T. While at NC A&T she was a member of Alpha Lambda Delta Honors Society, Kappa Omicron Nu Honors Society, Golden Key National Honor Society, and Minorities in Agriculture. Deidra was enrolled in the Master's Program in Animal Science at Southern Illinois University-Carbondale. Her

research involved diets that influence the fat content of milk in cows. She completed her M.S. program in August 2008. She is now in NC. She worked at Smithfield Packing Co in Tar Heel, NC where she was a Research and Development Technologist. She has recently started a new position as the FSQA Coordinator.

Harriet Chantay Crockett graduated with an M.S. in 2007 from SIUC in Molecular, Cellular & Systemic Physiology. Her research /faculty advisor was Dr. Laura Murphy, Associate Professor in Physiology. Harriet's research study was "Characterizing the effects of American Ginseng on Human Chronic Myeloid Leukemia cell proliferation and finding alternative forms of treatment for leukemia



alternative forms of treatment for leukemia." This study revealed that American Ginseng and one of its active ingredients, RH2, has a profound effect on decreasing cell proliferation in leukemia cells. She received her B.S. degree in 2005 in Molecular, Cellular & Systemic Physiology from Alcorn State University, Lorman, Mississippi. Her current status is Research Technologist at St. Jude in Memphis, TN.



Alicia Gutierrez-Valenzuela graduated from the University of Illinois at Chicago. She received a Master of Science in Electrical Engineering in 2004. She knew that for a Latina woman it was a difficult field to enter because engineering has been a male dominated field. However, she wanted to challenge herself and overcome the obstacles so she decided to pursue an engineering career.

At UIC, she was actively involved as an ELITE mentor, Supplemental Instructor, and held different role positions within the Society of Hispanic Professional Engineers (SHPE). She joined the organization mainly because she wanted to help people. She saw in this organization what she did not see in other organizations, the potential to motivate others to realize that their goals can be more than dreams; you can make them a reality. Being a leader in SHPE helped her gain internships at Lucent Technologies and Motorola. Although she received a master's degree in electrical engineering, she wanted to continue to motivate other students to pursue a higher education. Therefore, she decided to become an educator. Currently, she is teaching at Simmons Middle School where the majority of the students come from low socio-economic families and the majority is Hispanic.

**Tiffany Gates** graduated from CSU with Mathematics Honours in Spring 2003. She was a MIP scholar. Ms. Gates earned a M.S. in Financial Mathematics degree from the University of Chicago in June 2009. She joined the Federal Reserve Bank of Chicago in September 2003 and she is now a Policy and Risk Analyst.





Michael Roundtree graduated with honors from Chicago State University with a Masters' Degree in Mathematics in spring 2008. His M.S. thesis was on Differential Forms and Applications to Complex Function Theory. Michael also

earned a B.S. degree in Computer Science from CSU and B.S. degree in Mathematics from UIUC. He is a former marine and he teaches high school mathematics in the Chicago Public Schools.

Arturo Jurado was initially admitted to CSU in fall 2004 as a student in the first cohort of students in the Honors College. Graduating magna cum laude, in 2008 he was in the first batch of honors students graduate with a B.S. in mathematics. Arturo went on to graduate with honors with a Masters' Degree in Mathematics in spring 2010. His Masters'



thesis entitled *Reconstructing Phylogenetic Trees From Evolutionary Data* was the first thesis on Mathematical Biology from the department of Mathematics. Throughout his undergraduate and graduate careers he attended conferences including the National Collegiate Honors and Conferences in which he served as moderator, and the Excellence in Teaching Math and Science 2009-2011 Symposium series. He has taught high school mathematics in Chicago and most recently established his own business servicing high school and college students as an independent tutor.



**Dr. Corpia C. Smith** is a Chicago State University Alumna. She majored in Biochemistry and graduated *cum laude* from CSU in May 2002 with a Bachelors Degree. She earned a Doctorate of Medicine form the Northwestern University Feinberg School of Medicine. During her time at Northwestern, she served as President of the Student

National Medical Association and as Chairman/Coordinator of the 2004 Regional SNMA Conference, where renowned guest speakers such as Michelle Obama and Dr. Horace Grant were in attendance. She is currently completing her Internal Medicine Residency Training at the University of Chicago North Shore Program in Evanston, Illinois.

Miguel Barnes is pursuing a Bachelors of Arts in Mathematics and Applied Statistics. He has completed The Urban Public Policy Fellows Program which took place from 2010-2011 at UIC and later in 2011 presented at the African American & Latino Research: Building a Community of Scholars at UIC. Later in the summer he worked as an intern at the



Institute for Policy and Civic Engagement and as an intern in the Illinois State Treasurer's Office of Dan Rutherford. He plans to attend the Congressional Hispanic Caucus Institute (CHCI) in the summer of 2012 as an undergraduate and later in his career path request to participate in the STEM program in summer of 2013, and thus apply his degree in cooperation with government.



Bonita Harrison graduated from Chicago State University with a 4.0 GPA in Mathematics in spring of 2004. She had the support of the CSEMS grants from the NSF. Bonita taught Mathematics at the Chicago Public Schools after graduation. She took her career to lecture at Ghana Telecom University in Ghana, West Africa. She

has worked as a financial analyst at PepsiCo. Bonita is also a successful business owner of KBM Realty, where she earned designations for being Hyde Park's highest selling agent. Bonita plans on completing a Ph.D. in Business Statistics at the University of Illinois at Chicago.

Ramon Acosta Diaz, Jr. graduated in 2009 from the University of Illinois at Chicago with a B.S. in Electrical Engineering. His Research Papers include Identification of Sources of Electromagnetic and Radio Frequency Fields on the International Space Station and Validation of Mathieu function subroutines by comparisons with MATHEMATICA and other exact



formulas. Somehow he always knew he wanted to pursue a career in sciences. While attending UIC, he received an internship with General Electric where he had the opportunity to see the technical service aspect of the company. His second internship was at NASA's Johnson Space Center. At JSC, he performed research with the radiological office to identify and quantize the amount of radiation exposure astronauts undergo in the international space station. He is currently a Naval Officer with the United States Navy where he is attending the Civil Engineer Corps Officer School. Upon completion of his training he will work as a construction manager for Naval Facilities Engineering Command (NAVFAC) Northwest in Washington State.



Ramon Rocha graduated from the University of Illinois at Chicago in 2010 with a Bachelor of Science in Electrical Engineering. As a child Ramon knew what his future entailed. His curiosity for how things work was an early sign of his interest in a STEM field. During his undergraduate career Ramon participated as an intern at Midwest Generation a local

power generation plant. Currently, he is a Systems Engineer Co-Op at Motorola Solutions while pursuing his Masters Degree in Electrical Engineering.

Earlene LaToya Thompson got a B.S. in computer science from Jackson State University in Jackson, Mississippi in 2005. She furthered her education with an M.S. in 2007 in computer science at Southern Illinois University Carbondale. Her research/faculty advisor was Mengxia Zhu in her project: Researching how to visualize large amounts of data over a network



efficiently with minimum delay. Since scientific and medical data is petabyte size, there is a need to rely information from a super computer to desktop for user to visualize in a space and time manner. Earlene is Employed by Caterpillar, Inc. in East Peoria, IL.



**Ikechukwu** Achebe is a senior Biological Sciences major at DePaul University. He works with Dr. Kenshu Shimada on "Cranial musculature of *Pseudocarcharias kamoharai*, and its implications to Lamniform phylogeny." Achebe presented his research at the Chicago Area Under-graduate Research Symposium in April 2011. He indicated, "The research experience has taught me a

great deal about commitment. The ups and down of my project have trained me to remain steadfast to the goals I set for myself-to contribute to the sciences. Being a student, I see how the skills I learn as a researcher translate to the academic realm of undergraduate life. I look forward to continuing and completing my research in the coming year. Overall, researching has been a privilege, an enlightening experience."

Tyneka Latrese Harris earned her 2005 B.S. and 2007 and M.S. in Computer Science from DePaul University, and is currently working on an M.S. in Predictive Analytics. She is a Project Manager in the Student Affairs Division at DePaul. Tyneka was very involved in ILSAMP as an undergraduate, presenting her research at numerous student conferences and acting



as a mentor for other students. Describing the moment when she realized she could do science, she says, "I will never forget my Ah-Ha moment, sitting in class as the professor began passing back our midterm. The teacher placed my exam in front of me and I turned it over and saw 100%. At that moment I knew that it didn't matter what my background was as long as I applied myself." Tyneka credits the ILSAMP program for helping her to succeed, saying that advisors and faculty were willing to invest energy, resources and the guidance she needed on her journey of education.



Kristen Jordan graduated from Southern Illinois University Carbondale with a B.S. degree in Zoology in August 2011. Currently, she is pursuing a master's degree in Zoology at SIUC where she received a PROMPT Fellowship. She will continue working with her mentor Dr. Brooks on aquatic ecology. As an undergraduate her accomplishments included the Dean's List, the 2010 Saluki Scholars

Research Opportunity Assistantship, the Green Scholarship, the McNair Scholars Program, ILSAMP, and being listed with Who's Who Among American College Students. Recently, Ms. Kristen presented her research at the American Society of Limnology and Oceanography in San Juan, Puerto Rico. Also, this summer she participated in the LSAMP summer research experience in Jamaica.

Taiwo Durowade graduated from Illinois State University in 2009 with a B.S. in Biochemistry and Molecular Biology. She is currently attending the University of Illinois-Rockford College of Medicine and is in her third year of medical school. She says the mentoring program provided through ILSAMP was a significant step in her medical school path. Her mentor got her



organized, helped her choose the right classes and got her a research position which gave her a boost in her resume. Her research was funded by a grant from ILSAMP, funding she believes got her to where she is today.



Maureen Adanma Ebo, graduated from ISU in 2008. She indicated, "...the ILSAMP Program provided immense academic help to her by providing tutors that helped coach her through some of her hard pre-requisite classes for pharmacy school." It contributed to her smooth transition to the rigors of professional school. The ILSAMP program provided a mentor, Dr. David Cedeno, who

coached, and advised her, and provided recommendation letters which contributed to her acceptance into professional school. ILSAMP also provided the financial resources for her as well as the opportunity to network and attend science forums that helped shape her career perspective. Maureen is currently enrolled in the University of Illinois College Of Pharmacy and is a 2013 Doctor of Pharmacy candidate. Maureen is an active member in several pre pharmacy clubs.

Felicia James was an ILSAMP member at Illinois State University from (2004-2008). She graduated in December of 2008 with a Bachelor of Science degree in Biological Sciences. She has recently decided to go back to school and pursue another degree. She is now attending Fox College in Tinley Park, IL pursuing a degree in Physical Therapy. She has always loved science and



the healthcare field, and her biology background from ISU has helped her fulfill her dreams. Being a part of ILSAMP while at ISU helped her strive and provided her with the foundation for success as well as the motivation to always be her best.



John Carson earned a B.S. in Electrical Engineering in 1994 from the Illinois Institute of Technology located in Chicago, IL. However he began his academic pursuits in engineering when he enrolled in Chicago State University's Engineering Studies Program after graduating high school. He began his career working in the

Illinois Department of Transportation's Bureau of Electrical Operations (IDOT) designing electrical systems for IDOT facilities. For the past decade he has been a Systems Engineer for a consulting firm, LTK Engineering Services, providing voice, video and data systems engineering designs for rail transit agencies across the United States.

Brian Wright graduated in 2007 from Chicago State University with a B.S. in Chemistry. At CSU he participated in computational chemistry research at Argonne Laboratory as part of the FaST (Faculty and Student Team) Program under Dr. Mardis. In 2010 he received his M.S. Degree in Technology as a part of the Science, Technology, Engineering, and Mathematics



(STEM) Education & Leadership Master of Science Degree Program at Illinois State University. Currently he is the Small Learning Communities Facilitator and also teaches Chemistry, Physics, and Project Lead the Way courses at Thornton Township High School in Harvey, Illinois.



**Joshua J. Lawrence** completed his B.S. in Electrical Engineering at the University of Illinois at Chicago in May 2010, where he participated in research and presented his research at the ILSAMP conference in 2010. Among his achievements, was 1<sup>st</sup> Place in category at the UIC Engineering Expo; was awarded scholarships from Caterpillar and

Northrop Grumman; was a NACME scholar; involved with the UIC chapter of the National Society of Black Engineers as president, and Eta Kappa Nu, the electrical engineering honor society. Joshua is currently pursuing his M.S. in Electrical Engineering at Northwestern University, and is the first-ever Caterpillar Inc.-sponsored National GEM Consortium Fellow. Beyond academics, Joshua has over a year of experience at Caterpillar Inc., where he became 6 Sigma Green Belt trained (product improvement, estimated product value in excess of \$1 million). His goals and endeavors include project management, outreach to young students about the importance of college and STEM fields, and active leadership.

Christopher Gallardo is a senior Biological Sciences major at DePaul University. His current research project, funded by the ILSAMP program, is studying the taxonomic composition of the vertebrate fauna at new Lincoln Limestone locality (the "Table Mesa") in the Comanche National Grasslands in southeastern



Colorado. The data collected in the research will allow inferences to be made about the paleoecology and paleoenvironment of the Western Interior Seaway.



Erika Spencer graduated with a B.S. in Environmental Sciences from DePaul University in June 2011. While an undergraduate, Erica worked on a research project investigating the relationship between a plant and multiple mycorrhizal fungi. She designed and conducted a research experiment to see if infection by

multiple mycorrhizal fungi is a benefit or cost to a plant. She is currently working in Chicago while applying to graduate schools for fall 2012.

**Dr. Lisa R. Abston,** received her baccalaureate degree from Chicago State University in 1996. As an ILSAMP undergraduate student, she conducted research in an organic chemistry laboratory. She earned a doctoral degree from the Inter-disciplinary Biological Sciences Program at Northwestern



University. While at Northwestern University, Dr. Abston received the NIH Cellular and Molecular Basis of Disease Training Grant and the Graduate School's University Fellowship award. Upon completion of her Ph.D., Dr. Abston received a post-doctoral fellowship in the Respiratory Biology Training Program at The University of Chicago. While there she received the NIH Ruth L. Kirschstein National Research Service Award F32 Individual Fellowship. She is now Director of the Prehealth Professions Program and instructor in the Department of Biological Sciences at Chicago State University.



Isaiah Cole is a senior Environmental Sciences major at DePaul University. As an ILSAMP research assistant, Cole worked on projects geared toward understanding prairie restoration in Illinois. His research was designed to understand the impact

that the symbiotic relationship between arbuscular myscorrhizal fungi and prairie plants has on the ability of the native ecosystem to restore itself. Cole will be graduating in winter 2012 and intends to travel to Belize to help replant the tropical rainforest before applying to graduate school.

Robert Jason Walker is a doctoral student in the Integrated Program in Biomedical Sciences at The University of Tennessee Health Science Center. He received a B.S. in 2005 from Alcorn State University, Lorman, Mississippi in Molecular, Cellular and Systemic Physiology. He was a Bridge to Doctorate Fellow at Southern Illinois



University Carbondale in Molecular Biology, Microbiology and Biochemistry, where he received an M.S. in 2007. He became interested in diabetic retinopathy, which is the leading cause of vision loss in people of working age in the U.S, during his masters work and he continues work on this condition in his doctoral program. Robert has co- authored four excellent articles on this subject.



Aisha Williams is a chemistry and biology major at Chicago State University slated to graduate winter of 2012. Throughout her undergraduate career she has presented her research in biochemistry and genetics at more than fifteen different venues. Aisha was selected to participate in ILSAMP's research abroad program where she conducted

biochemistry research at the Leloir Institute in Buenos Aires, Argentina. She is currently awaiting acceptance into graduate M.D./Ph.D. Programs.

**Dr. Nastassia Jones** completed an M.S. and Ph.D. in Microbiology at Southern Illinois University at Carbondale. She is just beginning her first semester as an Assistant Professor of Biology at Philander Smith College in Little Rock, Arkansas. Dr. Jones presented numerous papers and received prestigious awards such as the



Joshua E. Neimark Memorial Travel Assistance Endowment Award from AAAS. Following her NSF-ILSAMP Bridge to Doctorate Fellowship, she served as a GK-12 Fellow, during which time she developed a keen interest in evidence-based science education. Her dissertation was a combined scientific and educational research study entitled: "Investigating nitrate-dependent humic substance oxidation and in-service K-12 teachers' understanding of microbiology."