An Excerpt from our RISE Newsletter 2015

“The Rise of RISE”
by Marcos Miranda

Environmental Engineering

The RISE Program has a rich history in the College of Engineering here at the University of Delaware. When RISE was first created in 1972 its original name was the Minority Engineering Program (MEP), and signified a commitment by the University to encourage and facilitate the growth of minority students within the engineering program. The program grew in influence and size until the name was changed in 1985 to Resources to Insure Successful Engineers. The program has been fortunate to have several esteemed directors, several who have continued on with their careers at the University of Delaware. Each director has been able to raise the program to a new level of commitment and growth. RISE has moved forward, shifting its focus from serving minority students to working with all students as the program continues to grow and thrive. I was fortunate enough to sit down and speak with previous RISE Program directors and our current Program Director, Ms. Marianne Johnson.

Ms. Johnson became the current RISE Program Director in 2006 and has been with the program ever since. Ms. Johnson admits that when she became the Program Coordinator in 1995 she had some hesitation over guiding students in a subject matter where she had no academic experience. However, over time, she realized that the RISE Program was more about providing students with overall guidance and giving them the support that was necessary for their success. When I prompted Ms. Johnson about changes in the RISE Program that she had observed over the years, she was quick to point to something that surprisingly hasn’t changed. She complimented the numerous years of students who had participated in the RISE Program, saying that all students exhibited the same passion to succeed here within the College of Engineering. Each set of students demonstrated a unique commitment to the program and to one another, something that is invaluable for them to move forward in their education. This commitment to one another is something that has come to be a defining attribute of the RISE Program.

I was fortunate enough to sit down and speak with a former Program Director; Dr. Michael Vaughan, Associate Dean in the College of Engineering. Dean Vaughan was the Program Director of the RISE Program from 1992 to 2006. He entered into the position of director at a crucial time for the program. Concern had arisen over the sustainability of the program and it was apparent that the program was undergoing a transition period. Dean Vaughan worked hard to address these concerns, primarily those voiced by the students. Under his guidance, the program saw a growth in student engagement and a large diversification of the program participants. Dean Vaughan was instrumental in guiding the RISE Program during this time of change. When I prompted Dean Vaughan on where he sees the program going, he didn’t hesitate with his answer. Dean Vaughan shared with me his vision in which the RISE Program was able to grow into an influential service on campus, which not only would provide a welcoming environment for all students, but also provide them with the resources necessary to succeed. I believe that Dean Vaughan, Ms. Johnson and all RISE participants notice that RISE is more than a program focused on diversity and academics. RISE provides us with a strong sense of community and supportive environment, full of inclusivity. Whatever the goal of the RISE Program is, I can be certain that as it develops, it will continue to provide support and be a source of inclusion that hopefully, will one day be extended to all students on campus, not only limited to students within the College of Engineering.
I am pleased to invite you to share in this edition of the RISE Program Newsletter. Throughout the academic year, as well as during the summer and winter, RISE Program participants are excelling academically; supporting our campus through their leadership and service; traveling to other countries to study abroad, and making discoveries through research that can literally change our daily mode of operation. It is important that all those who have a vested interest in the students of the RISE Program understand the scope of the many accomplishments they experience during their matriculation at the University of Delaware.

We look forward to this newsletter serving as a vehicle to highlight our students and the many interests they have in addition to their primary goal of obtaining a degree in Engineering. Our students, along with the Graduate Counselor, Paul Ojewoye have worked diligently to produce this newsletter and we hope you will enjoy the articles enclosed. We look forward to your feedback and your continued support.

Marianne Johnson ~ Academic Program Manager ~ Student Development & Support ~ RISE Program

Meet Our RSAC Members

Tobias Mazal  
Senior  
Chemical Engineering

Joy Muthami  
Sophomore  
Chemical and Biomolecular Engineering

Amy Nicolas  
Senior  
Chemical Engineering

I still don’t know what the future will bring for me after my degree. I chose engineering due to my passion for science and problem-solving. I hope to apply this very affinity into a path, in which, I can better the world and pursue a career I enjoy.

With my degree, I hope to go to graduate school for Nuclear Engineering, and eventually become a researcher in the field of nuclear energy.

I want to pursue careers in software design and work on interesting projects, as well as work on my own.

I intend to use my degree to pursue a job in industry, working in the exciting field of tissue engineering. I would also be interested in using it to further pursue my education, in the future. Overall, there is a lot that can be done with a degree in biomedical engineering and I am open to the various options.

As an aspiring chemical engineer, I have many career paths to choose from. Yet I have a particular interest in one of two career choices: either industry and process safety design or pharmaceuticals.

I want to use my chemical engineering degree in the pharmaceutical industry. I want to participate in research and development of new drugs.

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Student Organization Partners

NSBE  
National Society of Black Engineers

SHPE  
Society of Hispanic Professional Engineers

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Hello my name is Rachel Kennel and I graduated from the University of Delaware in 2015 with a bachelor’s in Chemical Engineering. I was a RISE student through more than 4 years of college, beginning with the Summer Enrichment Program before my first freshman semester. SEP was a great start to college and instilled some important habits, both academic and social, for getting through the engineering workload. I also met some friends through SEP and RISE that stayed with me through school. I currently work at a small private company in Wilmington, DE, which designs, manufactures, and sells benchtop life science laboratory instruments to worldwide markets. I found this opportunity through a family member who knew the CEO and advised me to use her name when I contacted the company. There was no open position or job listing, however I inquired through the company website about whether there were any opportunities for me as a recent graduate, expressing interest in the company through my previous internship at a different instrument company. When looking for jobs, it really is who you know, and while I did not use my RISE contacts to find my current job, I made some very valuable contacts and friends through RISE.

As a chemical engineer, I plan on pursuing a career in cosmetics, hair products, and consumer product manufacturing. I aspire to have my own line of cosmetics for women of color.

My name is Myles Powell and I am a 2012 University of Delaware Civil Engineering graduate. I was also a proud member of RISE for my four-year journey at UD. As I look back on my experiences with RISE and evaluate my current professional role, I can appreciate a strong link and a connection that has continued to propel me forward.

Through the RISE Program, I sat in a room full of equally dedicated individuals and listened to presentations of those who painted a picture of both hope and opportunity in the professional world. RISE is an extremely strong community bond that in many ways served as a personal and professional guide book that you can carry with you at all times through college and beyond. Lessons taught regarding networking, professionalism, goal planning, and many more, are some of which I use on a nearly daily basis as a young professional.

As you enter into the professional world you will undergo growth on many levels. For the first four years after my graduation, I was constantly evaluating something that can sometimes get swept under the rug as we focus on our career: my happiness. The “I hate Mondays” syndrome was a constant theme amongst my colleagues and I exhibited signs of the same ailment. It’s incredible to believe that there is a belief that one can only succeed through a prescribed path and must sacrifice true happiness in order to become a successful individual. I believe that if you truly find what you love doing and follow your passion, success is sure to follow.

I want to be a civil engineer because we are the most CIVILized major. Also I want to enter the realm of politics with a scientific perspective instead of a political science approach.

A producer of gourmet and health conscious sauces. While it may come as a surprise that I am no longer in the engineering realm, one lesson I learned through my engineering curriculum, which is a pillar of my success today, can be summed up on one word: hustle. Hard work and unrelenting dedication, demonstrated by many long and stressful nights, are symptoms of what it takes to graduate from UD’s engineering program. These attributes became habits of mine and pushed me to chase my dream of becoming a business owner. Graduating with an engineering degree will put you in a position to pursue a myriad of opportunities. I urge you to have confidence in yourself to pursue the path that will truly make you happy.
I entered the RISE (Resources to Insure Successful Engineers) Program during the summer of 1987 as Michele Ann Connor, a freshman student entering into the Mechanical Engineering program. I grew up in Baltimore, Maryland and much like my peers at the time, I graduated in the top 5% of my high school class. I have to be honest, Delaware was not my first choice, but who could turn down a full scholarship! What I gained during my 4 years in the RISE Program was much more than a free ride.

My memories of my time at the University of Delaware are primarily related to the relationships and career development opportunities established while I was in the RISE Program. I am forever thankful to the guidance provided by Frank Wells, who was the program director during my time in RISE. Mr. Wells prepared me for my first job interview by providing mock interviews and guidance on proper dress. My peers in RISE became my study partners and a shelter on campus which did not offer much diversity. Through RISE, I received my first of three paid engineering internships with Hercules Inc., in Terre Haute, Indiana, Dow Corning Corporation and DuPont Corporation. Each of my internships were in different parts of the country and prepared me in the long run to be open to relocation to pursue job opportunities throughout my career.

I was introduced to NSBE (National Society of Black Engineers) and was able to attend both regional and national conferences which led to additional summer internships and exposure to other African Americans who were pursuing careers in Engineering. Also, during my time at the University of Delaware, I was able to participate in a study abroad program during junior year in Madrid, Spain. The most important thing I received from RISE was that it grew my confidence by providing a support network with my African American engineering peers and taught me leadership skills, all of which prepared me to be successful in my career.

My journey since graduating from the University of Delaware and RISE has led me to work for two corporations in the past 25 years in various engineering roles in support of manufacturing. I started my career with Dow Corning in Midland, Michigan and Carrollton, KY working in various engineering support roles. For the past 21 years, I have been employed with Aftria Group, a fortune 200 company which is one of the world’s largest producers and marketers of tobacco, cigarette, and related products. I have worked in various roles in engineering leadership rising to the role as Director of Manufacturing Engineering for our moist smokeless tobacco products. I have traveled throughout Europe and South America collaborating with our international counterpart to develop engineering processes. Today, I am Director of Plant Operations in Franklin Park, Illinois where I am responsible for 300 employees in various roles from skill trades, production operators, engineers, finance, and HR.

Since graduating from the University of Delaware in 1991, I have lived in Michigan, Kentucky, Virginia, Tennessee, and Illinois. I acquired my Master’s in Business Administration from Virginia Commonwealth University in 2001. I am an active member of Jack and Jill of America, Inc. and a member of Zeta Phi Beta Sorority, Inc. My hobbies include reading, writing poetry, and traveling the world. My most significant accomplishment has been my role as wife and mother. Today, I am a widow and the mother to a 12 year old daughter.
Words from RISE Alumni

The individuals you surround yourself with will affect your future. If you run with wolves you’ll learn to howl, but if you associate with eagles, you will learn to soar to great heights. That’s why it is so important who you choose to connect yourself with. Your circle should be limited to people who are moving toward a prosperous future and are pushing you toward greater.

Thinking back on my college experience at UD, it was amazing. I loved the freedom and tolerated the workload. All I could think about during college was graduating and making real money. Looking back now, I truly miss college, it was the best 4 years of my life. I wish somebody would have told me to really appreciate those years. You can’t be so focused on the destination that you don’t take time to appreciate the journey. You may have to take a detour or hit some rough terrain, but any step forward is a step closer to your destiny. Make sure you take time to look in the rear view and see how far you have come.

Getting to where I am now wasn’t just handed to me. If we’re being real, college was a STRUGGLE. I quit many times in my head. I remember coming back to my room in the Towers after an exam and laying across my bed knowing I just failed. It is amazing how I could study for a week straight, get a few hours of sleep, then get to the exam and have to look around the classroom and make sure I’m in the right class, because I didn’t recognize anything on the paper. My roommate and I would sit and try to come up with ways we could still be successful if we left UD. Staying in school and engineering was always the conclusion we came to. I just had to dig deeper and grind harder. Failure and quitting was not an option. I told myself by any means necessary I was going to walk across that stage with an engineering degree in my hand. That meant I had to sacrifice many weekends to study, read ahead and do practice exercises. I also had to step out of my comfort zone many times and ask for help. I became a regular at office hours for both the professor and the TA. I didn’t like it but it’s what was necessary to secure my future. You have to continually push yourself to do better and be better. The harder you are on yourself the easier life will be on you. Never get to the place where you become content. Muhammad Ali said “I hated every minute of training, but I told myself don’t quit, suffer [grind] now and live the rest of your life like a champion.” I’m standing here now saying it was all worth it.

My transition from UD to my career was seamless. I was relentless in my job search. Every application was followed up with an email; every email was followed up with a phone call. I was applying for jobs well before I graduated. One struggle I did have was underestimating my abilities. I would talk myself out of some jobs that I didn’t feel I was qualified to do before I even submitted the application. This was due to the way I struggled through college. I had to quickly change that mentally, and realize once again how far I’ve come. There is nothing I can’t do! Work is so much easier than school was. Real talk. If you are doing what you love, it’s not really work. When seeking that job, you just have to go after what you want, don’t settle for less and know your self-worth. Also, don’t be afraid to put yourself out there and ask for help if you’re struggling. There are many RISE graduates that are doing what you are looking to do in industry, in addition to University professors and Deans who have numerous personal contacts. Reach out and make the connections.

In the next 5 years, I see myself continuing to do what I do, simply at a higher level. As I said before, I am never content with my current condition. I am always looking for ways to improve and elevate my career. At some point in the future, I will also be starting my own business separate from engineering. This will be in addition to continuing my engineering career. They say the sky is the limit, so I’m planning to see what’s beyond that.

Student Interview

Q: How was your first semester of college?

My first year at UD was everything I wanted it to be and more! I’ve gotten to experience so much from “silent disco” and undergraduate research to becoming a two-time intramural sport champ and meeting life-long friends.

Q: What campus activities/clubs/intramural sports/etc. are you in? / Are you involved in any extra-curricular activities on campus?

I’m a part of Outing Club, Biomedical Engineering Society, the Gleghorn Lab research group, Delaware Innovation Fellows, Freshman Fellows for the Honors Program, and teams for intramural flag football, soccer, dodgeball, and Frisbee.

Q: What inspired you to have an engineering major?

I was a product of dinosaur sticker books and science camps. It only made sense to pursue the sciences. When I was deciding on a program, I decided I wanted to make the products, not test other people’s work. This is the main reason I wanted to be an engineer – to innovate.

Q: What advice would you give to an incoming freshman?

Don’t sweat the small stuff. If you have a bad day you can recover. Also, try as many things as you can no matter how stupid you think you look! You might find something you really like and real friends that are willing to do anything with you.

Q: What do you enjoy most about being an engineering student?

Well it’s definitely not the homework. I enjoy the challenge of the course load and knowing that I could potentially better someone’s life with the work I would be doing in the future.

Q: Tell us about your experience with the RISE Program?

I go to all the requirements, but I feel that I haven’t made the connections that I would have wanted to in order to feel comfortable in the Program. I’m sure it will get better over time though!

Q: What are your goals when you graduate?

The goal is to get my PhD and then go into industry. I’ll probably teach after I retire from whatever jobs I have.

Q: Where’s your favorite place to do homework on campus? Why?

Definitely on my bed in my room because I get to wear pajamas. It’s really all about dedication. You don’t have to be the smartest or most involved, but you do have to try as hard as you can. It takes a certain level of perseverance to carry on in this major, but it is doable.

Q: Why biomedical engineering?

Biomedical engineering has the potential to raise someone’s quality of life. No matter how small the discovery in the field, there can be lasting impacts as small discoveries layer on top of another to create a solution to a major medical issue. Look at the myoelectric prosthetic arm or the automatic insulin pump that is dependent on continuous feedback. None of those things would be possible without the small bits of information gathered on electric impulses in the muscle or the pathway of hormones in the body. I’d like to contribute to a medical solution one of these days.

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Sienna Pyle

Freshman

Biomedical Engineering

Class of 2013

Jordan Wynn

University of Delaware Bachelor of Civil Engineering and 2015 Master’s of Civil Engineering graduate. I currently work as a Structural Engineer for a division of the Department of Defense known as the U.S. Army Corps of Engineers. My job includes bridge and dam inspections, bridge design, and analysis and building design work. My job has granted me opportunities beyond what I could even imagine. One of which is the ability to travel. I’ve been places I could have only dreamed of as a child growing up low-income to a single mother of four. Looking back on how far I’ve come, I am truly grateful for every opportunity and blessing God has allowed me to have.

Growing up, pursuing a career in engineering was never really a thought, simply because that’s not what I saw. A limited environment can limit your potential if you let it. That is why I am grateful for STEM programs such as RISE and even FAME (Forum to Advance Minorities in Engineering), which initially revealed other options available to me. RISE was very influential in assisting me to stay in engineering. The simple fact that it brings together individual who look like you, and are doing the same things you are trying to do is great.

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Q: Why did you choose UD?  
It was affordable and seemed to have everything I wanted in college.
Q: What campus activities do you participate in for fun?  
Career fair (Joking) But I do enjoy all campus activities with free food or clothing.
Q: How have you changed since your freshman year?  
I am more open-minded during their second semester of college, explore new interests, and develop personal connections that will become invaluable once coursework and college life become more challenging in following semesters.
Q: Where’s your favorite place to do homework on campus and why?  
The Morris library because it enforces silence!
Q: How was your first semester of college?  
I remember being open to all the new opportunities. I was engineering undeclared and still looking to decide which discipline I would be interested in.
Q: What campus activities/clubs/intramural sports/etc. are you in?  
Are you involved in any extra-curricular activities on campus?  
I am on the Lightweight Men’s Crew team.
Q: What inspired you to have an engineering major?  
I have always enjoyed problem solving and mathematics.
Q: What do you enjoy about being an engineering student?  
Knowing that I will more likely have a job after college! Also, every new topic introduced leads to a better understanding of the world and its environment.
Q: In your opinion, what personal qualities should a student possess to be a successful engineering student?  
Perseverance, initiative and PATIENCE!
Q: What do you enjoy most about being an engineering student?  
Being a Blue Hen has given me so many opportunities for growth and exploration of my interests. Over the past two years, I have had the chance to travel across the globe, and discover new passions through my involvement in both domestic and international projects. One of the most memorable parts of my college experience at UD so far was the month I spent learning about art, Arabic, and architecture in Morocco, during the winter of my freshman year. This trip helped me grow academically and personally – it immersed me into a culture that is vastly different from my own and helped me gain new global perspectives that influence the way I approach challenges that accompany the college experience.
Beginning in my freshman year, I became heavily involved in Engineers Without Borders (EWB) UD, which has introduced me to ways that I can use my engineering knowledge to empower communities around the world. I have also become more involved in the National Society of Black Engineers (NSBE), and in doing so, I have developed professionally and learned more about options for furthering my education after graduation from the University of Delaware through workshops and conferences. One of the most valuable parts of my UD experience has been the connections I have made with my peers. The guidance that I have received through my relationships with people in both RISE and NSBE have been essential parts of my development as a College of Engineering student so far.
I joined RISE in the fall semester of my freshman year, and I have received guidance from staff and fellow RISE members, professional development opportunities, academic and moral support through tutoring and RISE study breaks. As Community Service Chair of NSBE, I organize community service initiatives in Newark and Wilmington in an effort to strengthen our chapter’s relationship with the local community and help engage our members in constructive and fun service events. NSBE’s career fairs in both Norfolk, Virginia and Kansas City, Missouri over the past two semesters have exposed me to numerous companies and programs that gave me a better understanding of the limitless career options that a mechanical engineering degree at UD can provide. I am also a mentor for the Each One Reach One program run through the Center for Black Culture, which has been a great way to mentor and guide freshman students as they navigate the rigors of college life, and to become more connected with students on campus.
For the past year and a half, I have been a project manager for a water disinfection and distribution project in a small community called Ubujan in the Philippines. Our primary goal is to design and implement a water system that secures their access to potable drinking water. Being a part of an incredible interdisciplinary team of students in EWB has been one of the most fulfilling experiences I have ever had. I feel so fortunate to be able to work on a project as dynamic, challenging, and complex as this one in the Philippines, and I truly hope that we can make a lasting impact on the lives of our community partners.

My first experience with research took place during the summer after my freshman year at Columbia University, where I conducted a study under Dr. Kartik Chandran’s environmental engineering lab. While working at Columbia, I developed methods to optimize the bioremediation of waste streams into bioplastics, which is a sustainable alternative to producing plastic from petrochemical sources. During the fall semester of my freshman year, I began biomedical engineering research in Dr. Jason Gleghorn’s lab. As a part of this lab group, I am able to apply the mechanical engineering principles I am learning in class to biological systems to help investigate the root causes of congenital birth defects. I am currently working on a study that investigates the role of smooth muscle airway forces on asthma pathology and I will be continuing work on this project this summer as a McNair Scholar.
My primary goal for the rest of my time at UD is to finish my coursework and graduate having a good grasp on the tools that I have learned to be an effective engineer. I hope to take the FE (Fundamentals of Engineering) exam and prepare to continue my education in a graduate program. I also look forward to the day that...
Student Winter Experience
Tobias Mazal, Chemical Engineering

“A STUDY ABROAD”

This past winter I was fortunate enough to be able to partake in a study abroad program here at the University of Delaware. Last New Year’s Eve, a group of around 30 junior and senior Chemical Engineering students boarded a plane and after a day of travel, found ourselves in Melbourne, Australia. For the month of January, we resided in this new land, taking classes with students at the University of Melbourne and attending weekend excursions to magnificent sites like Phillip Island and the Great Ocean Road. At the Phillip Island Wildlife Park, we found ourselves surrounded by Australia’s intriguing fauna including cassowaries, wallabies, and wombats (yes, those are real animals!). We even had the chance to hop around with the innumerable kangaroos roaming in the park’s expanse and fed them from our own palms!

During the week when we found time outside of our studies, we hit the city and toured the streets, some of which featured buildings covered in colorful, outstanding pieces of graffiti. New found friends from the University of Melbourne showed us around the city and took us out to the trending restaurants and pubs. The nightlife was lively, to say the least. We also had the chance to explore local attractions like Melbourne’s spectacular Royal Botanic Gardens and the Queen Victoria Market, which buzzed with tourists and, nature alike. One weekend, we were lucky enough to make the getaway up the coast to Cairns and check out one of the Seven Natural Wonders of the World, the Great Barrier Reef. Snorkelling at the reef was one of the most breathtaking experiences of my life—fish swarmed around us as we glided over the glorious, vibrant corals teeming with life. A friend and I ventured a bit further and found manta rays, giant clams, and even a friendly shark!

On the last week of our stay, we travelled to Sydney and visited the iconic Sydney Opera House. We caught a wonderful show, a tribute to John Lennon, before saying goodbye to Australia. If you ever get the chance to study abroad, I would absolutely recommend it. Besides all the stunning sights and fun adventures, the experience exposed me to a new society complete with its own cultural nuances and intriguing history, especially its Aboriginal origins, and helped to expand my world view. I also had the chance to connect with students and colleagues both across the world and on the trip and hope to remain in touch with these companions over the years. All of us had shared an unforgettable experience in exploring a new part of the world and I’m sure I’ll be going back to visit again.

The Junior Perspective
Ana Haddad, Chemical Engineering

A veteran of 3 years in the RISE Program, Ana has not only survived the rigors of a degree in Chemical Engineering, but flourished in her time here. Never failing to make the dean’s list, while still staying active in student organizations such as American Institute of Chemical Engineers (AIChE) and the Capoeira Club, Ana’s motivations run deep. When asked why it is she chose to major in Chemical Engineering, she shared how she was reached by exposure to engineering in high school:

“I was fortunate enough to attend a high school that had PLTW which is a program that gets engineering classes to high schools. I did mostly mechanical and electrical engineering classes. I liked the engineering design mentality and how problems were practical. I think engineering is a great major for anyone who is passionate about math and science and wants to apply those skills towards solving real world problems.”

But even with her unique motivation, Ana understands the challenges of earning an engineering degree. She related that freshman year was the first time she needed to seek outside resources to help her.

RISE was there for her. By going to workshops and events, she was able to meet others in the same boat as her, it was these friends she met in the RISE Program, as well as learning to plan far ahead in her schedule that helped her to be the success she is.

Ana’s success extends far beyond academics, from the get go Ana had set her sights on working in industry upon completion of her degree. To her the most valuable aspect of RISE was how it helped to connect her with opportunities in line with this ambition. By meeting employers at events and workshops Ana was able to gain a lot of knowledge about the internships available around her, and exposure to the people responsible for those internships. This culminated in her learning about the INROADS Program through RISE, and eventually, landing internships in her field.

Ana leaves the following as advice to the freshmen of the RISE Program:

“Keep your chin up and press on. Any engineering is a challenge, but you can get through it. Don’t be afraid to go to your professors, TAs, and peers for help. Engineering is a way to great opportunity down the road, even if it’s a challenge while you are going through it.”
This past winter I was fortunate enough to be able to partake in a study abroad program here at the University of Delaware. Last New Year’s Eve, a group of around 30 junior and senior Chemical Engineering students boarded a plane and after a day of travel, found ourselves in Melbourne, Australia. For the month of January, we resided in this new land, taking classes with students at the University of Melbourne and attending weekend excursions to magnificent sites like Phillip Island and the Great Ocean Road. At the Phillip Island Wildlife Park, we found ourselves surrounded by Australia’s intriguing fauna including cassowaries, wallabies, and wombats (yes, those are real animals!). We even had the chance to hop around with the innumerable kangaroos roaming in the park’s expanse and fed them from our own palms!

During the week when we found time outside of our studies, we hit the city and toured the streets, some of which featured buildings covered in colorful, outstanding pieces of graffiti. New found friends from the University of Melbourne showed us around the city and took us out to the trending restaurants and pubs. The nightlife was lively, to say the least. We also had the chance to explore local attractions like Melbourne’s spectacular Royal Botanic Gardens and the Queen Victoria Market, which buzzed with tourists and natives alike. One weekend, we were lucky enough to make the getway up the coast to Cairns and check out one of the Seven Natural Wonders of the World, the Great Barrier Reef. Snorkelling at the reef was one of the most breathtaking experiences of my life—fish swarmed around us as we glided over the glorious, vibrant corals teeming with life. A friend and I ventured a bit further and found manta rays, giant clams, and even a friendly shark!

On the last week of our stay, we travelled to Sydney and visited the iconic Sydney Opera House. We caught a wonderful show, a tribute to John Lennon, before saying goodbye to Australia. If you ever get the chance to study abroad, I would absolutely recommend it. Besides all the stunning sights and fun adventures, the experience exposed me to a new society complete with its own cultural nuances and intriguing history, especially its Aboriginal origins, and helped to expand my world view. I also had the chance to connect with students and colleagues both across the world and on the trip and hope to remain in touch with these companions over the years. All of us had shared an unforgettable experience in exploring a new part of the world and I’m sure I’ll be going back to visit again.

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**Senior Interview**

**Wyatt Grant**

**Mechanical Engineering**

Q: Why did you choose UD?  
It was affordable and seemed to have everything I wanted in col- 
lege.

Q: What campus activities do you participate in for fun?  
Career fair! (Joking) But I do enjoy all campus activities with free 
food or clothing.

Q: How have you changed since your freshman year?  
I understand mechanical engineering a whole lot better than 
when I started! I also believe I have improved interpersonal skills 
and become more open to ideas.

Q: Where’s your favorite place to do homework on campus and why?  
The Morris library because it enforces silence!

Q: How has your experience at UD impacted your decision in 
becoming an engineer?  
UD provides so much more than just your major, ultimately 
allowing for engineering students to do more outside of their 
degree and be a balanced individual.

Q: In your opinion, what personal qualities should a student 
possess to be a successful engineering student?  
Perseverance, initiative and PATIENCE!

Q: How did you find out about the RISE Program?  
I was part of RISE from the start and have continually participated 
in their program.

Q: Tell us about your experience with the RISE Program?  
My experience with the RISE Program has always been very posi-
tive. It has been very helpful and supportive throughout these 
past 4 years.

Q: How has the RISE Program helped you in your process of be-
coming an engineer?  
RISE has always provided resources to help with challenging 
courses such as upper level math and fluids/thermo.

Q: How do you feel about your major so far?  
I definitely learned something. Despite being difficult at times, I 
feel these challenges encourage better discipline and stress-
management.

Q: What are your plans after graduation?  
I will be working for Mueller Associates in Lithium, MD and 
doing things that I love.

**The Sophomore Perspective**

**Olivia Powell, Mechanical Engineering**

Being a Blue Hen has given me so many oppor-
tunities for growth and exploration of my inter-
est. Over the past two years, I have had the 
chance to travel across the globe, and discover 
new passions. During my involvement in both 
domestic and international projects. One of the 
most memorable parts of my college experience at UD so far was the month I spent learning 
about art, Arabic, and architecture in Morocco, 
during the winter of my freshman year. This trip 
helped me grow academically and personally – 
it immersed me into a culture that is vastly 
different from my own and helped me gain new 
global perspectives that influence the way I 
approach challenges that accompany the col-
lege experience.

Beginning in my freshman year, I became heav-
ily involved in Engineers Without Borders (EWB) UD, 
which has introduced me to ways that I can use my engineering knowledge to empower 
communities around the world. I have also be-
come more involved in the National Society of 
Black Engineers (NSBE), and in doing so, I have 
developed professionally and learned more 
about options for furthering my education after 
graduation from the University of Delaware through workshops and conferences. One of the 
most valuable parts of my UD experience has 
been the connections I have made with my 
peers. The guidance that I have received through 
my relationships with people in both 
RISE and NSBE have been essential parts of my 
development as a College of Engineering stu-
dent so far.

I joined RISE in the fall semester of my freshman 
year, and I have received guidance from staff 
and fellow RISE members, professional develop-
ment opportunities, academic and moral sup-
port through tutoring and RISE study breaks. As 
Community Service Chair of NSBE, I organize 
community service initiatives in Newark and 
Wilmington in an effort to strengthen our chap-
ter’s relationship with the local community and 
help engage our members in constructive and 
fun service events. NSBE’s career fairs in both 
Norfolk, Virginia and Kansas City, Missouri over 
the past two semesters have exposed me to 
umerous companies and programs that gave 
me a better understanding of the limitless ca-
reer options that a mechanical engineering de-
gree at UD can provide. I am also a mentor for 
the Each One Reach One program run through 
the Center for Black Culture, which has been 
both a great way to mentor and guide freshman stu-
dents as they navigate the rigors of college life, 
and to become more connected with students on 
campus.

For the past year and a half, I have been a pro-
ject manager for a water disinfection and distri-
bution project in a small community called Ubu-
jan in the Philippines. Our primary goal is to 
design and implement a water system that so-
cures their access to potable drinking water. 
Being a part of an incredible interdisciplinary 
team of students in EWB has been one of the 
most fulfilling experiences I have ever had. I feel 
so fortunate to be able to work on a project as 
dynamic, challenging, and complex as our in 
the Philippines, and I truly hope that we can 
make a lasting impact on the lives of our com-
nunity partners.

My first experience with research took place 
during the summer after my freshman year at 
Columbia University, where I conducted a study 
under Dr. Kartik Chandran’s environmental engi-
neering lab. While working at Columbia, I devel-
oped methods to optimize the bioremediation of 
water streams into biosolids, which is a 
sustainable alternative to producing plastic from 
petrochemical sources. During the fall semester 
of my freshman year, I began biomedical engi-
neering research in Dr. Jason Gleghorn’s lab. As 
a part of this lab group, I am able to apply the 
mechanical engineering principles I am learning 
in class to biological systems to help investigate 
the root causes of congenital birth defects. I am 
currently working on a study that investigates 
the role of smooth muscle airway forces on 
asma pathoclogy and I will be continuing work 
on this project this summer as a McNair Scholar.

My primary goal for the rest of my time at UD is 
that I will more than likely have a job after college! Also, 
every new topic introduced leads to a better understanding of the world and its environment. 

Q: How was your first semester of college?  
I remember being open to all the new opportunities. I was engi-
neering undeclared and still looking to decide which discipline I 
would be interested in.

Q: What campus activities/clubs/intramural sports/etc. are you in?  
Are you involved in any extra-curricular activities on cam-
pus? I am on the Lightweight Men’s Crew team.

Q: What inspired you to have an engineering major?  
I have always enjoyed problem solving and mathematics.

Q: Why did you choose Mechanical Engineering?  
I chose Mechanical Engineering because Professor Buckley gave 
the best speech and introduction at the intro to engineering 
course out of all the engineering disciplines.

Q: What advice would you give to an incoming freshman?  
Don’t be afraid to ask and/or try new opportunities. College is 
supposed to be a time of exploration.

Q: What do you enjoy most about being an engineering stu-
dent?  
Knowing that I will more than likely have a job after college! Also, 
every new topic introduced leads to a better understanding of the world and its environment.
Q: What advice would you give to an incoming freshman?

Don’t sweat the small stuff. If you have a bad day you can recover. Also, try as many things as you can no matter how stupid you think you look! You might find something you really like and real friends that are willing to do anything with you.

Q: What do you enjoy most about being an engineering student?

Well it’s definitely not the homework. I enjoy the challenge of the course load and knowing that I could potentially better someone’s life with the work I would be doing in the future.

Q: Tell us about your experience with the RISE Program?

I go to all the requirements, but I feel that I haven’t made the connections that I would have wanted to in order to feel comfortable in the Program. I’m sure it will get better over time though!

Q: What are your goals when you graduate?

The goal is to get my PhD and then go into industry. I’ll probably teach after I retire from whatever jobs I have.

Q: Where’s your favorite place to do homework on campus?

Definitely on my bed in my room because I get to wear pajamas.

Q: In your opinion, what personal qualities should a student possess to be a successful engineering student?

It’s really all about dedication. You don’t have to be the smartest or most involved, but you do have to try as hard as you can. It takes a certain level of perseverance to carry on in this major, but it is doable.

Q: Why biomedical engineering?

Biomedical engineering has the potential to raise someone’s quality of life. No matter how small the discovery in the field, there can be lasting impacts as small discoveries layer on top of one another to create a solution to a major medical issue. Look at the myoelectric prosthetic arm or the automatic insulin pump that is dependent on continuous feedback. None of those things would be possible without the small bits of information gathered on electric impulses in the muscle or the pathway of hormones in the body. I’d like to contribute to a medical solution one of these days.

Q: How was your first semester of college?

My first semester of college was everything I wanted it to be and more! I’ve gotten to experience so much from “silent disco” and undergraduate research to becoming a two-time intramural sport champ and meeting life-long friends.

Q: What campus activities/clubs/intramural sports/etc. are you in? Are you involved in any extra-curricular activities on campus?

I’m a part of Outing Club, Biomedical Engineering Society, the Glenn Lab research group, Delaware Innovation Fellows, Freshman Fellows for the Honors Program, and teams for intramural flag football, soccer, dodgeball, and Frisbee.

Q: What inspired you to have an engineering major?

I was a product of dinosaur sticker books and science camps. It only made sense to pursue the sciences. When I was deciding on a program, I decided I wanted to make the products, not test other people’s work. This is the main reason I wanted to be an engineer – to innovate.

Sienna Pyle
Freshman
Biomedical Engineering

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My name is Jordan Wynn, a 2013 University of Delaware Bachelor’s of Civil Engineering and 2015 Master’s of Civil Engineering graduate. I currently work as a Structural Engineer for a division of the Department of Defense known as the U.S. Army Corps of Engineers. My job includes bridge and dam inspections, bridge design, and analysis and building design work. My job has granted me opportunities beyond what I could ever imagine. One of which is the ability to travel. I’ve been places I could have only dreamed of as a child growing up low-income to a single mother of four. Looking how far I’ve come, I am truly grateful for every opportunity and blessing God has allowed me to have.

Growing up, pursuing a career in engineering was never really a thought, simply because that’s not what I saw. A limited environment can limit your potential if you let it. That is why I am grateful for STEM programs such as RISE and even FAME (Forum to Advance Minorities in Engineering), which initially revealed other options available to me. RISE was very influential in assisting me to stay in engineering. The simple fact that it brings together individuals who look like you, and are doing the same things you are trying to do is great.

The individuals you surround yourself with will affect your future. If you run with wolves you’ll learn to howl, but if you associate with eagles, you will learn to soar to great heights. That’s why it is so important who you choose to connect yourself with. Your circle should be limited to people who are moving toward a prosperous future and are pushing you toward greater.

Thinking back on my college experience at UD, it was amazing. I loved the freedom and tolerated the workload. All I could think about during college was graduating and making real money. Looking back now, I truly miss college, it was the best 4 years of my life. I wish somebody would have told me to really appreciate those years. You can’t be so focused on the destination that you don’t take time to appreciate the journey. You may have to take a detour or hit some rough terrain, but any step forward is a step closer to your destination. Make sure you take time to look in the rear view and see how far you have come.

Getting to where I am now wasn’t just handed to me. If we’re being real, college was a STRUGGLE. I quit many times in my head. I remember coming back to my room in the Towers after an exam and laying across my bed knowing I just failed. It is amazing how I could study for a week straight, get a few hours of sleep, then get to the exam and have to look around the classroom and make sure I’m in the right class, because I didn’t recognize anything on the paper. My roommate and I would sit and try to come up with ways we could still be successful if we left UD. Staying in school and engineering was always the conclusion we came to. I just had to dig deeper and grind harder. Failure and quitting was not an option. I told myself by any means necessary I was going to have a degree in my hand. That meant I had to sacrifice and income to a single mother of four. Looking how far I’ve come, I am truly grateful for every opportunity and blessing God has allowed me to have.

My transition from UD to my career was seamless. I was relentless in my job search. Every application was followed up with an email; every email was followed up with a phone call. I was applying for jobs well before I graduated. One struggle I did have was underestimated my abilities. I would talk myself out of some jobs that I didn’t feel was qualified to do before I even submitted the application. This was due to the way I struggled through college. I had to quickly change that mentally, and realize on continuing to do what I do, simply at a higher level. As I said before, I am never content with my current condition. I am always looking for ways to improve and elevate my career. At some point in the future, I will also be starting my own business separate from engineering. This will be in addition to continuing my engineering career. They say the sky is the limit, so I’m planning to see what’s beyond that.

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Michele Allen
Class of 1991

I entered the RISE (Resources to Insure Successful Engineers) Program during the summer of 1987 as Michele Ann Connor, a freshman student entering into the Mechanical Engineering program. I grew up in Baltimore, Maryland and much like my peers at the time, I graduated in the top 5% of my high school class. I have to be honest, Delaware was not my first choice, but who could turn down a full scholarship? What I gained during my 4 years in the RISE Program was much more than a free ride.

My memories of my time at the University of Delaware are primarily related to the relationships and career development opportunities established while I was in the RISE Program. I am forever thankful to the guidance provided by Frank Wells, who was the program director during my time in RISE. Mr. Wells prepared me for my first job interview by providing mock interviews and guidance on proper dress. My peers in RISE became my study partners and a shelter on campus which did not offer much diversity. Through RISE, I received my first of three paid engineering internships with Hercules Inc., in Terre Haute, Indiana, Dow Corning Corporation and DuPont Corporation. Each of my internships were in different parts of the country and prepared me in the long run to be open to relocation to pursue job opportunities throughout my career.

I was introduced to NSBE (National Society of Black Engineers) and was able to attend both regional and national conferences which led to additional summer internships and exposure to other African Americans who were pursuing careers in Engineering. Also, during my time at the University of Delaware, I was able to participate in a study abroad program during junior year in Madrid, Spain. The most important thing I received from RISE was that it grew my confidence by providing a support network with my African American engineering peers and taught me leadership skills, all of which prepared me to be successful in my career.

My journey since graduating from the University of Delaware and RISE has led me to work for two corporations in the past 25 years in various engineering roles in support of manufacturing. I started my career with Dow Corning in Midland, Michigan and Carrollton, KY working in various engineering support roles. For the past 21 years, I have been employed with Altria Group, a fortune 200 company which is one of the world’s largest producers and marketers of tobacco, cigarette, and related products. I have worked in various roles in engineering leadership rising to the role as Director of Manufacturing Engineering for our moist smokeless tobacco products. I have traveled throughout Europe and South America collaborating with our international counterpart to develop engineering processes. Today, I am Director of Plant Operations in Franklin Park, Illinois where I am responsible for 300 employees in various roles from skill trades, production operators, engineers, finance, and HR.

Since graduating from the University of Delaware in 1991, I have lived in Michigan, Kentucky, Virginia, Tennessee, and Illinois. I acquired my Master’s in Business Administration from Virginia Commonwealth University in 2001. I am an active member of Jack and Jill of America, Inc. and a member of Zeta Phi Beta Sorority, Inc. My hobbies include reading, writing poetry, and traveling the world. My most significant accomplishment has been my role as wife and mother. Today, I am a widow and the mother to a 12 year old daughter.

Andrew Dapper
Freshman
Chemical Engineering

Q: Tell us about your experience with the RISE Program?
My experience has been relatively positive overall.
Q: Why did you choose UD?
I like the location, the good reputation of the chemical engineering program, and the financial benefits it offered me.
Q: What campus activities do you participate in for fun?
In addition to the activities I listed for the first question, I enjoy attending Perkins Live events on weekends.
Q: What are your goals when you graduate?
I would like to obtain a position at a pharmaceutical company and continue my education by studying for an MBA.
Q: Where's your favorite place to do homework on campus?
I like studying in the library and the study lounges of Redding because they are easy to access and quiet.
Q: How was your first semester of college?
Although it was tough, the overall learning and social experience has been very positive.
Q: What campus activities/clubs/intramural sports/etc. are you involved in?/Are you involved in any extracurricular activities on campus?
I am in Delaware Cycling club, intramural beach volleyball, intramural soccer, and Engineers Without Borders.
Q: What inspired you to have an engineering major?
Both of my parents are engineers and I also enjoy chemistry.
Q: What advice would you give to an incoming freshman?
Join registered student organizations on campus, be involved, and have fun making new friends from different backgrounds.
Q: What do you enjoy most about being an engineering student?
I like the opportunities that the University of Delaware offers for engineers, including the study abroad trip to Spain where I can earn credit in materials science.
Meet Our RSAC Members

Latifa Ali
Sophomore
Mechanical Engineering

Danielle Cevis
Freshman
Biomedical Engineering

Kierstyn Harris
Senior
Chemical Engineering

Jorge Hernandez
Freshmen
Civil Engineering

Heidi Herrera
Freshman
Chemical Engineering

Shi Johnson-Bey
Senior
Computer Science and Neuroscience

Hello my name is Rachel Kennel and I graduated from the University of Delaware in 2015 with a bachelor’s in Chemical Engineering. I was a RISE student through more than 4 years of college, beginning with the Summer Enrichment Program before my first freshman semester. SEP was a great start to college and instilled some important habits, both academic and social, for getting through the engineering workload. I also met some friends through SEP and RISE that stayed with me through school. I currently work at a small private company in Wilmington, DE, which designs, manufactures, and sells benchtop life science laboratory instruments to worldwide markets. I found this opportunity through a family member who knew the CEO and advised me to use her name when I contacted the company. There was no open position or job listing, however I inquired through the company website about whether there were any opportunities for me as a recent graduate, expressing interest in the company and citing my previous internship at a different instrument company. When looking for jobs, it really is who you know, and while I did not use my RISE contacts to find my current job, I made some very valuable contacts and friends through RISE.

As a chemical engineer, I plan to pursue a career in cosmetics, hair products, and consumer product manufacturing. I aspire to have my own line of cosmetics for women of color.

I plan on using my mechanical engineering degree to land a job in either the aerospace or manufacturing sectors.

As a biomedical engineering major, I intend to go into neuroscience research on brain mapping and neuroimaging.

As a chemical engineer, I plan to pursue a career in cosmetics, hair products, and consumer product manufacturing. I aspire to have my own line of cosmetics for women of color.

I want to be a civil engineer because we are the most CIVILized major. Also I want to enter the realm of politics with a scientific perspective instead of a political science approach.

My name is Myles Powell and I am a 2012 University of Delaware Civil Engineering graduate. I was also a proud member of RISE for my four-year journey at UD. As I look back on my experiences with RISE and evaluate my current professional role, I can appreciate a strong link and a connection that has continued to propel me forward.

Through the RISE Program, I sat in a room full of equally dedicated individuals and listened to presentations of those who painted a picture of both hope and opportunity in the professional world. RISE is an extremely strong community bond that in many ways served as a personal and professional guide book that you can carry with you at all times through college and beyond. Lessons taught regarding networking, professionalism, goal planning, and many more, are some of which I use on a nearly daily basis as a young professional.

As you enter into the professional world you will undergo growth on many levels. For the first four years after my graduation, I was constantly evaluating something that can sometimes get swept under the rug as we focus on our career: my happiness. The "I hate Mondays" syndrome was a constant theme amongst my colleagues and I exhibited signs of the same ailment. It's incredible to believe that there is a belief that one can only succeed through a prescribed path and must sacrifice true happiness in order to become a successful individual. I believe that if you truly find what you love doing and follow your passion, success is sure to follow.

I am the founder and owner of 8 Myles LLC, a producer of gourmet and health conscious sauces. While it may come as a surprise that I am no longer in the engineering realm, one lesson I learned through my engineering curriculum, which is a pillar of my success today, can be summed up on one word: hustle. Hard work and unrelenting dedication, demonstrated by many long and stressful nights, are symptoms of what it takes to graduate from UD’s engineering program. These attributes became habits of mine and pushed me to chase my dream of becoming a business owner. Graduating with an engineering degree will put you in a position to pursue a myriad of opportunities. I urge you to have confidence in yourself to pursue the path that will truly make you happy.
I am pleased to invite you to share in this edition of the RISE Program Newsletter. Throughout the academic year, as well as during the summer and winter, RISE Program participants are excelling academically; supporting our campus through their leadership and service; traveling to other countries to study abroad, and making discoveries through research that can literally change our daily mode of operation. It is important that all those who have a vested interest in the students of the RISE Program understand the scope of the many accomplishments they experience during their matriculation at the University of Delaware.

We look forward to this newsletter serving as a vehicle to highlight our students and the many interests they have in addition to their primary goal of obtaining a degree in Engineering. Our students, along with the Graduate Counselor, Paul Ojewoye have worked diligently to produce this newsletter and we hope you will enjoy the articles enclosed. We look forward to your feedback and your continued support.

Marianne Johnson ~ Academic Program Manager ~ Student Development & Support ~ RISE Program

Meet Our RSAC Members

Tobias Mazal
Senior
Chemical Engineering

Joy Muthami
Sophomore
Chemical and Biomolecular Engineering

Amy Nicolas
Senior
Chemical Engineering

I still don’t know what the future will bring for me after my degree. I chose engineering due to my passion for science and problem-solving. I hope to apply this very affinity into a path, in which, I can better the world and pursue a career I enjoy.

With my degree, I hope to go to graduate school for Nuclear Engineering, and eventually become a researcher in the field of nuclear energy.

I want to use my chemical engineering degree in the pharmaceutical industry. I want to participate in research and development of new drugs.

Ian Pierce
Sophomore
Biomedical Engineering

Tyler Sastre
Junior
Computer Science Computer Science B.S.

Mohamed Seck
Sophomore
Chemical Engineering

I intend to use my degree to pursue a job in industry, working in the exciting field of tissue engineering. I would also be interested in using it to further pursue my education, in the future. Overall, there is a lot that can be done with a degree in biomedical engineering and I am open to the various options.

I want to pursue careers in software design and work on interesting projects, as well as work on my own.

As an aspiring chemical engineer, I have many career paths to choose from. Yet I have a particular interest in one of two career choices: either industry and process safety design or pharmaceuticals.

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The Rise Program has a rich history in the College of Engineering here at the University of Delaware. When RISE was first created in 1972 its original name was the Minority Engineering Program (MEP), and signified a commitment by the University to encourage and facilitate the growth of minority students within the Engineering program. The program grew in influence and size until the name was changed in 1985 to Resources to Insure Successful Engineers. The program has been fortunate to have several esteemed directors, several who have continued on with their careers at the University of Delaware. Each director has been able to raise the program to a new level of commitment and growth. RISE has moved forward, shifting its focus from serving minority students to working with all students as the program continues to grow and thrive. I was fortunate enough to sit down and speak with previous RISE Program directors and our current Program Director, Ms. Marianne Johnson.

Ms. Johnson became the current RISE Program Director in 2006 and has been with the program ever since. Ms. Johnson admits that when she became the Program Coordinator in 1995 she had some hesitation over guiding students in a subject matter where she had no academic experience. However, overtime, she realized that the RISE Program was more about providing students with overall guidance and giving them the support that was necessary for their success. When I prompted Ms. Johnson about changes in the RISE Program that she had observed over the years, she was quick to point to something that surprisingly hasn’t changed. She complimented the numerous years of students who had participated in the RISE Program, saying that all students exhibited the same passion to succeed here within the College of Engineering. Each set of students demonstrated a unique commitment to the program and to one another, something that is invaluable for them to move forward in their education. This commitment to one another is something that has come to be a defining attribute of the RISE Program.

I was fortunate enough to sit down and speak with a former Program Director; Dr. Michael Vaughan, Associate Dean in the College of Engineering. Dean Vaughan was the Program Director of the RISE Program from 1992 to 2006. He entered into the position of director at a crucial time for the program. Concern had arisen over the sustainability of the program and it was apparent that the program was undergoing a transition period. Dean Vaughan worked hard to address these concerns, primarily those voiced by the students. Under his guidance, the program saw a growth in student engagement and a large diversification of the program participants. Dean Vaughan was instrumental in guiding the RISE Program during this time of change. When I prompted Dean Vaughan on where he sees the program going, he didn’t hesitate with his answer. Dean Vaughan shared with me his vision in which the RISE Program was able to grow into an influential service on campus, which not only would provide a welcoming environment for all students, but also provide them with the resources necessary to succeed. I believe that Dean Vaughan, Ms. Johnson and all RISE participants notice that RISE is more than a program focused on diversity and academics. RISE provides us with a strong sense of community and supportive environment, full of inclusivity. Whatever the goal of the RISE Program is, I can be certain that as it develops, it will continue to provide support and be a source of inclusion that hopefully, will one day be extended to all students on campus, not only limited to students within the College of Engineering.