As you may already know, Dean Nick Altiero stepped down in August after serving as the inaugural dean of the School of Sciences and Engineering. Dean Altiero began at Tulane in 2000 as Dean of the former School of Engineering, and was instrumental in the transition of the college following Katrina. We will all miss his leadership, innovation, and optimism. Professor Mike Herman from the Department of Chemistry is serving as Interim Dean, and a vigorous search for the next dean of SSE is ongoing. Chemical and Biomolecular Engineering continues to work with Interim Dean Herman and the College to strengthen interdisciplinary programs and student programs.

As you will see in this year’s newsletter, faculty and students have won prestigious awards, we have hired talented new staff, and we have continued a tradition of outstanding scholarship at all levels. In the last academic year, we graduated four PhD students and twenty-three BS students. Prof. Katie Russell and Franz Vogt (Tulane BSE, ‘66; MS ‘71) designed a new fluid friction apparatus to replace aging equipment in the unit operations lab, part of several planned new equipment upgrades. Our active student chapters of the Society of Women Engineers, Women in Science and Engineering, and American Institute of Chemical Engineers continue to provide professional development and networking opportunities for our students. The diversity of the department continues to grow and we are planning to hire another faculty member this year. I hope you will be as enthusiastic as I am about all of the positive changes in the department.
The National Science Foundation has recently funded a collaborative effort between the Shantz and Ashbaugh labs of the Department of Chemical and Biomolecular Engineering. This combined computational-experimental program will lead to new approaches for more efficient water utilization. The energy sector is one of the largest consumers of water on a per capita basis. Enabling the energy sector to use and reuse water more efficiently will have broad societal benefits and will also present new pathways by which the challenge of water scarcity can be meaningfully addressed. The NSF-funded work will tackle this grand challenge by using low-energy adsorption on functional surfaces to remove biomass-derived fuels from the water stream in which they are produced. As the Principal Investigator, Dr. Daniel Shantz commented, “This award will yield new insights into how the chemical composition of functional surfaces can impact the removal of dilute species (<10%) in water, a widespread problem that will enable advances in water usage, impacting the energy, agriculture, and environmental sectors.” The outcome from this project will be new science and students trained to be future leaders in the field of energy production and the management of water in the energy space. The work in this award will combine molecular simulations with cutting-edge experimental tools to probe both the molecular mechanisms for biomass adsorption, and to optimize the design of low-energy adsorption media. “This coupled approach will prove transformative by allowing the team to observe engineering properties and relate them to atomistic structural details, ultimately enabling the team to predict what properties are key to successfully perform the separation of interest.”, says Dr. Hank Ashbaugh. Molecular simulations will examine the roles of electrostatic and hydrophobic interactions on selective adsorption of distinct components of the biomass effluent to build molecular models of adsorption that can be compared directly to experiment and guide the synthesis of new adsorption surface chemistries. Finally, existing and new outreach efforts will be leveraged to support and expand the pipeline of K-12 and undergraduate students to pursue careers in the STEM workforce.

NFS funds collaborative grant for improved water usage

Disease Detection Research — Pesika Lab

The detection of biomolecules has undergone unprecedented growth in recent years partly driven by the need for point-of-care systems for clinical applications. Specifically, there is a need for portable, high-sensitivity detectors for biomolecules [such as proteins like antibodies and antigens] so that clinicians can quickly and accurately detect diseases in patients. The Pesika group has expertise in measuring and modeling interactions between surfaces, particles, and molecules, leading to the development of “smart” materials for a variety of sensing applications. As a member of the Vector-Borne Infectious Diseases Research Center (VBIDRC), the Pesika group, in collaboration with Dr. Nirbhay Kumar (Department of Tropical Medicine and VBIDRC) are working to develop carbon nanotube-based electrochemical sensors, which are expected to have significantly improved sensitivity for detection of biomolecules. If successful, the novel electrochemical sensor will be adapted to detect numerous diseases, as well as impurities such as heavy metals in drinking water. This research is supported by a Carol Lavin Bernick Faculty Grant.
Please Welcome Our New Staff!

Janel Fielding, Accountant II

Chemical and Biomolecular Engineering is pleased to announce the addition of two new staff members this year. Janel Fielding (Accountant II) comes to us from CityBusiness and New Orleans Magazine. Along with her accounting background, she has 19 years of business ownership and operation. She started in March and has already proven to be a major asset to the department.

Blake Trombatore (Lab Technician) joins us from Dow Chemical. He began working in August and has become instrumental in the continuing operation and safety of all the department’s teaching and research laboratories.

Tulane shares in $41.7 million grant to lower drug costs

Barri Bronston, Tulane New Wave

Tulane and three other universities have received a $6.1 million grant from the National Science Foundation to study ways to lower the cost of drugs for illnesses such as Crohn’s, breast cancer, and multiple sclerosis. The four-year grant is among eight awards totaling $41.7 million announced Wednesday by the NSF’s Established Program to Stimulate Competitive Research, also known as EPSCoR.

Tulane is part of a team that is led by Clemson University and includes the University of Delaware and Delaware State University. The team will study better ways of engineering Chinese hamster ovary (CHO) cells, which are used to manufacture more than half of all biopharmaceuticals.

“CHO cells are very good at producing human proteins, but suffer from some stability issues – kind of like having a fancy sports car that doesn’t always run well,” said Dr. Anne Skaja Robinson, chair of the Department of Chemical and Biomolecular Engineering at Tulane, and a co-principal investigator of the study. “The overall goal is to improve the performance and have the same ability to produce human proteins that can be used for therapies, which will ultimately reduce costs.”

The project, which also includes team member Dr. Nicholas Sandoval, a chemical and biomolecular assistant professor at Tulane, aims to increase patient access to costly medication, while training undergraduate and graduate students and building a more diverse workforce skilled in the advanced biomanufacturing area.

The team has deep experience in supporting underrepresented groups and is well-suited to mentor diverse faculty members and students,” Dr. Robinson said. “The grant will help support programs that deepen our commitment to creating a more diverse workforce.” The awards will be used to study the relationship in organisms between genetic material and physical characteristics due to gene expression and environmental influences. This relationship has significant implications for new drug therapies, improved food crop yields and better prediction of human disease risk.

Dr. Anne Skaja Robinson will lead the Tulane team that will explore ways to lower the price of drugs.
Lawrence Pratt To Receive 2018 Joel Henry Hildebrand Award

Dr. Lawrence Pratt has been awarded the 2018 Joel Henry Hildebrand Award in the Theoretical and Experimental Chemistry of Liquids by the American Chemical Society. Dr. Pratt joined Tulane’s Chemical and Biomolecular Engineering Department as the Herman and George R. Brown Chair in 2008, after 24 years as a staff scientist at Los Alamos National Laboratory. Dr. Pratt is a world-renowned theoretical chemist, known for his contributions to understanding the insolubility of oils in water, kinetic processes in solution, energy storage in super capacitors, and illuminating connections between local molecular interactions and bulk liquid-state thermodynamics. The Joel Henry Hildebrand Award, sponsored by ExxonMobil Research and Engineering, is the premier international award recognizing distinguished contributions to the understanding of the chemistry and physics of liquids. This award, will be presented at the 255th ACS National Meeting on March 20th, 2018 here in New Orleans.

Microbial Measures — Sandoval Lab

Ph.D. candidate Rochelle Carla Joseph shows Dr. Nicholas Sandoval her cultures growing inside the lab’s anaerobic chamber. The chamber keeps the oxygen content below 1 part per million, since oxygen is toxic to the biofuel-producing microorganisms of interest. The members of the Sandoval lab are working to make various synthetic biology tools that will make genome editing and strain engineering faster and less expensive. Progress here will help enable sustainable chemical and transportation industries.

Residential Faculty Mentor Program

Dr. Katie Russell was featured in Tulane New Wave for her involvement with the Residential Faculty Mentor Program. The program aims to support first-year undergraduate students adjusting to university life. Dr. Russell hosted weekly events with Butler Hall residents, offering an opportunity for students to interact with faculty in a more casual environment.
This past summer, I was selected by the American Institute of Chemical Engineers (AIChE) to participate in the Washington Internships for Students of Engineering (WISE) program in Washington D.C. The WISE program works to expose engineering students to the intersection of science, technology, and public policy with the hope of demonstrating how scientists and engineers can influence decision-making. Over the course of nine weeks, I spent my time independently researching the status of seawater desalination in the United States, focusing on how the federal government could encourage greater implementation of the technology. In addition to my own research, I spoke with a wide variety of relevant stakeholders to gain a thorough understanding of the interests and concerns associated with seawater desalination. An engineering professional associated with seawater desalination was able to present my research in a conference in Minneapolis, where I was able to present my research in the Undergraduate Research Forum. Overall, the WISE program introduced me to the realm of government policy, and I gained an appreciation for the importance of developing the interface between engineering and policy.

**Note about the author:** Lauren Bartels wrote an article entitled “The Ocean Holds Solutions to Water Sustainability Challenges” that was published in the 2017 September edition of *Chemical Engineering Progress*. Lauren is also one of two students who won the Chevron scholarship for academic achievement.

### Chemical Engineering 2017 Publications


**Zhang, Y, Y Su, Y Wang, J He, G McPherson, V John** (2017) Rapid Fabrication of Hollow and Yolk-shell a-Fc203 Particles with Applications to Enhanced Photo-Fenton Reactions, *RCS Advances*, 7:39049
US — Israel Energy Program
Mary Sparacello, Tulane New Wave

An initiative headquartered at Tulane University fosters academic collaboration between U.S. and Israeli universities to address shared energy challenges. The work of the planned U.S.-Israel Energy Research Innovation Center has been jump-started by a $100,000 gift from Tulane parents Stuart and Suzanne Grant. Their gift allows faculty and students to travel between the U.S. and Israel to collaborate and conduct research.

“This is letting us build bridges between institutions, both within the U.S. but also between U.S. and Israel in a way that would have simply not been possible without it,” says Dr. Daniel Shantz, Entergy Chair in Clean Energy Engineering and a professor in the Department of Chemical and Biomolecular Engineering.

The Grants’ gift enabled Dr. Shantz to travel to Israel in May of 2017 to meet with academics and government officials there. The gift also allowed Tulane student Imri Frenkel, a rising senior majoring in chemical engineering, to participate in a summer internship in the Segal-Peretz lab at the Technion-Israel Institute of Technology. His work, making ultrafiltration membranes for water purification, builds on his research experience in the Albert lab at Tulane.

In addition to Tulane, American partners include University of Louisiana at Lafayette, the University of Washington, Texas A&M University, Louisiana State University and Argonne National Laboratory. Partners in Israel include the Technion-Israel Institute of Technology, the Hebrew University of Jerusalem and Geological Survey of Israel. The center will have four main pillars: hydrogen extraction and processing, energy infrastructure and coastal resiliency, produced and processed water treatment and alternative energy resources.

The Grants’ gift will position Tulane to compete for the proposed U.S. Department of Energy (DOE) Center of Excellence in Energy Engineering and Water Technology that was authorized by Congress in 2014. Congress had allocated funding for the Center in both the House and Senate Fiscal Year 18 Appropriations bills, so a request for proposals from DOE is possible within 3 to 6 months.

“We are delighted to be a part of such a worthwhile endeavor that will promote academic partnership between the United States and Israel,” says Stuart Grant.

“Tulane is well positioned to host the Center given its position in the Gulf and storied history of research and development in energy technologies.”

Tulane receives grant to reduce auto emissions
Roger Dunaway, Tulane New Wave

Under the direction of Dr. Daniel Shantz, a professor of Chemical and Biomolecular Engineering and the Entergy Chair of Clean Energy Engineering, members of Tulane University will work with industrial scientists to assist in the development of next-generation materials designed to reduce harmful automotive emissions with financial support and equipment resources from SACHEM, Inc., a chemical science company.

Lab members and SACHEM scientists will collaborate to improve the performance of zeolite SSZ-39 in reducing the amount of harmful chemicals released into the atmosphere through auto exhaust. SSZ-39 is a solid material made of silicon that resembles a sponge. The Tulane team will test the ability of SSZ-39 in vehicles’ selective catalytic reduction (SCR), the system in cars that reduces harmful emissions. Specifically, the Tulane team will test SSZ-39’s efficiency in reducing nitrogen oxides, which contribute to the production of acid rain. The focus of this program is to help better understand the properties of SSZ-39, with the goal of demonstrating whether SSZ-39 could be a commercially viable SCR catalyst.

“The grant project is certainly relevant in the context of energy and the environment,” Shantz said. “This focused project will validate the ability of SSZ-39 to eliminate nitrogen oxides from automotive emissions systems by converting them to molecular nitrogen, the main component of the air we breathe. I am delighted that we will be able to work with scientists from SACHEM on this problem.”

According to Shantz, one of the challenges for SCR catalysts are their ability to handle temperature increases from typical operating conditions. If the system typically operates between 300-400 degrees Celsius, materials are needed that can handle higher temperatures for short periods of time. The inability of current materials to be able to handle these high-temperature excursions is a limitation of the current technology.

“The zeolite SSZ-39 material is something that could be potentially implemented in the next three years. What we are trying to do in the lab is to identify what this material can and cannot do: is it a good enough material catalytically? Will it be able to handle the temperature excursions better than the current state of the art?”, Shantz said. “Improvements in SCR technology will result in emissions systems in diesel trucks that will be able to operate longer, and emission systems will be replaced with less frequency. It goes without saying decreased nitrogen oxide emissions are beneficial to the environment,” Shantz added.

The Shantz Lab in the Chemical and Biomolecular Engineering Department at Tulane is focused on the development of new materials that will be relevant in energy generation, storage and conversion.

Eliminating nitrogen oxide emissions by converting them to molecular nitrogen would have a major impact on the environment.
Best Chemical Engineering Design Presentation

2017 Seniors Cody Beam, Jessica Quebedeaux, and Ashley Kester won best Chemical Engineering presentation at the Spring 2017 Engineering Design Expo for their Practice School project with Valentine Chemicals. They subsequently presented their project at the 2017 Tulane Engineering Forum.

The team was tasked with reducing condensation in the exhaust vent for a drum dryer process that releases steam vapor to the atmosphere. The goal was to assess a combination of approaches to prevent condensation of the exhaust from the dryer exhaust vent.

WISE: Women in Science and Engineering

Written by: Amy Goodson, Ph.D. Candidate for Chemical and Biomolecular Engineering

The graduate Women in Science and Engineering (WISE) group was founded this past year by graduate students Kate Elfer (Ph.D. candidate, Biomedical Engineering) and Amy Goodson (Ph.D. candidate, Chemical and Biomolecular Engineering) to support the professional development of all graduate students and to provide a comfortable environment for the discussion of gender-related issues that impact science and engineering fields. WISE events are open to all graduate students. Our activities to date have focused on professional development, wellness as a graduate student, and building a sense of community through social gatherings. Last year’s highlights included a workshop on finding and applying for fellowships, an Improv Night to practice public speaking skills, monthly Coffee Hours with guided discussions on topics like Mentoring Relationships and Imposter Syndrome, monthly Happy Hours at different New Orleans restaurants, and a LinkedIn workshop. If you are interested in learning more about or joining Tulane WISE, email wisetulane@gmail.com or join the Tulane WISE group on Facebook.

WISE members at a monthly social gathering to extend invitations to new potential members.

Members Pictured: Lydia Crawford, Ecology and Evolutionary Biology; Leila Pashazanusi, Chemical and Biomolecular Engineering; Debaroty Roy, Chemical and Biomolecular Engineering; Jessica Motherwell, BioInnovation; Samantha Kurtz, BioInnovation; Kaylynn Genemaras, BioInnovation.
Goldwater Scholarship Honor

In April, the Goldwater Scholarship Program announced their Scholars and Honorable Mentions for the 2017 competition. Out of the 1286 nominations received, 240 scholars and 307 Honorable Mentions were named. Three Tulane University students were among the awardees, including Chemical and Biomolecular Engineering’s Sierra Lear. Congratulations Sierra!

Summer Materials Research at Tulane

During the Summer of 2017, Tulane’s School of Science and Engineering hosted the second year of the Summer Materials Research @ Tulane Research Experiences for Undergraduates program (SMART-REU). The SMART-REU brought in 14 undergraduates from across the country over 10 weeks to participate in research in labs in Chemical and Biomolecular Engineering, Chemistry, Biomedical Engineering, and Physics, and to attend workshops on research and laboratory skills. Student projects included: synthesis of polymeric materials for drug delivery, development of hydrogels for cell growth, simulations of supramolecular interactions in water, and measurements of ultra-low surface tensions, and many others. This program was concluded in early August, with a closing symposium in which students presented posters of their projects to the greater School of Science and Engineering community. Dr. Gilda Barabino, Dean of Engineering at the City University of New York and a New Orleans native, gave the keynote; she discussed her research and gave advice for career success in STEM fields. Dr. Hank Ashbaugh from the Department of Chemical and Biomolecular Engineering serves as the co-director of the SMART-REU program, with co-director Dr. Scott Grayson from the Department of Chemistry. The SMART-REU program, sponsored by a grant from the National Science Foundation, aims to raise the visibility of research in materials science at Tulane’s School of Science and Engineering, provide research opportunities for students from diverse backgrounds, and promote graduate research in STEM fields. The SMART-REU program will be offered again in the Summer of 2018. More information regarding this program can be found at smartreu.tulane.edu.

Langmuir Poster Award

Ph.D. candidate Leila Pashazanusi, from the Pesika lab, won the Best Poster Award during the ACS Colloids meeting in July 2017. “The Langmuir best poster award was chosen by a panel of judges who evaluated one hundred graduate students’ posters. They picked the winner based on research significance, results and clarity of presentations.

“My research aims to provide a better understanding of how a mosquito leg interacts with solid surfaces of varying wetting properties and roughness, which can potentially be applied in the development of superior Long Lasting Insecticidal Nets (LLINs). These nets are one of the most effective methods to mitigate mosquito-transmitted infectious diseases such as malaria, Zika, and dengue,” stated Pashazanuzi.

SWE Monsanto Scholarship Winner

Chemical Engineering senior, Dena El-Giar was selected by the Society of Women Engineers (SWE) for the 2017 Monsanto Scholarship. SWE’s mission is to stimulate women to achieve full potential in careers as engineers and leaders, expand the image of the engineering profession as a positive force in improving quality of life, and demonstrate the value of diversity. The Monsanto Scholarship recognizes undergraduate engineers for demonstrating outstanding academic achievement as well as strong engineering potential. Dena was awarded a scholarship of $1000 and SWE student membership through 2018. Congratulations Dena!

Dena El-Giar, Chemical and Biomolecular Engineering student, class of 2018
The Tulane section of SWE has grown tremendously over the past few years and is now very active in STEM outreach, professional development, mentorship, and providing opportunities for socialization between engineering students at Tulane. Starting in 2015, Tulane SWE became regular hosts of a welcome table and bridge-building workshop for the biannual Girls in STEM at Tulane (GiST) event. Because of success with GiST, the group was recruited to run the same bridge-building workshop for Boys at Tulane in STEM (BaTS) as well. Last year, several SWE members also mobilized to become counselors for Electric Girls, a group that introduces girls ages 5-14 to electronics basics. Tulane’s section became sponsor to Benjamin Franklin High School’s (BFHS) newly-founded SWENext Club, assisting with BFHS’s first STEM outreach event to middle school girls in the New Orleans area. The largest professional development activity each year is attendance at the SWE National Conference in October. With close to 10,000 attendees, this conference hosts the world’s largest career fair for women in engineering and technology. Each year SWE raises money through grants from Newcomb-Tulane College, Student Programs, and Newcomb College Institute, through participation in Schlumberger’s Stilettos-to-Steel-Toes initiative, and through solicitation of additional sponsorships to cover travel and registration expenses. Mentorship activities begin each year with a “speed mentoring” event at the first meeting of the semester between older SWE members (juniors and seniors) and newer members (freshman and sophomores), and continue throughout the year through social and study events like Bagel Breaks, Tea with SWE, informal dinner meet-ups, and the SSE Spring Mixer (co-hosted with Tulane Women in Science and Engineering). Other highlights from the past year include Dinika Singh’s interview by the SWE National organization about her dual major in Biomedical Engineering and Dance (featured on the website for the 2017 SWE National Conference) and Chemical Engineering major Dena El-Giar’s receipt of the SWE Monsanto Scholarship. If you are interested in learning more about Tulane SWE, participating in any of the events, or becoming a sponsor, contact Dr. Julie Albert (jalbert6@tulane.edu) or join the group on Facebook.

“SWE is a great way to get involved in the community, both professionally and in fellowship with other women in the field.”

-Avery Newsom, Biomedical Engineering 2018

Back Row (left to right): Alex Clarke (Biomedical Engineering 2018), Dena El-Giar (Chemical and Biomolecular Engineering 2018), Mary Kate Holleran (Chemical and Biomolecular Engineering 2017), Alena Skaria (Biomedical Engineering 2017)

Front Row (left to right): Amelia Bergeson (Chemical and Biomolecular Engineering 2018), Sarah Holt (Biomedical Engineering 2018), Rachel Russell (Biomedical Engineering 2019), Oyindayo “Honey” Hassan (Biomedical Engineering 2017)
Principles of Chemical Engineering offered through the Tulane Science Scholars Program

Each summer, the Tulane Science Scholars Program (TSSP) invites exceptional high school students to enroll in two-week long, college-level STEM courses taught by faculty in the School of Science and Engineering (SSE) for college credit. For the past two years, the Chemical and Biomolecular Engineering Department has offered a course through the program. Dr. Katie Russell developed and teaches Principles of Chemical Engineering with Lab to introduce students to the fundamentals of chemical engineering and increase interest in the field. “Concepts are reinforced with labs designed to provide hands-on experience. For example, the students have the opportunity to design, build, and test a heat exchanger after learning about heat transfer during lecture” says Dr. Russell. As part of the program, students also have the opportunity to live on campus and tour multiple SSE research labs.

New Experiment Added to Unit Operations Laboratory

During the Spring 2017 semester, a new experiment was implemented in the junior-level unit operations laboratory. Dr. Katie Russell, Professor of Practice, along with board of advisor member, Franz Vogt, B.S.E ’66; M.S. ’71, designed a fluid friction apparatus to reinforce concepts of flow and pressure that students learn in Transport I. The apparatus was based on plans from a similar unit at Louisiana State University and construction was supported by a generous donation from INEOS. During the three-day experiment, students calculate pressure losses in the system, generate a set of pump curves, and produce a process flow diagram of the apparatus. “The fluid flow lab was especially helpful during my summer internship with Schlumberger,” says Amira Muhsen, class of 2018. “At times the technical details were confusing, but when the fracking engineers explained that they pump a sand and water mixture downhole, I was able to have an in-depth conversation with them about friction and head loss.”

Chemical and Biomolecular Engineering students Jessie Troxler (2019), Nicholas Watts (2018), and Andrew Raymond (2018) collect flowrate and pressure loss data from the fluid friction apparatus.
Congratulations Class of 2017!

CBE B.S.E. graduating seniors from the class of 2017!

Top Row (left to right): Katie Granger, Yukihiro Kurusu, Arissa Baiamonte, Winnie Brackey, Tiffany Lou, Shelly Saito, Cody Beam, Daniel Zollinger, Kenny Kahle, Daniel Carusi
Bottom Row (left to right): Mary Kate Holleran, Emily Krzystowczyk, Kate Roberts, Sarah Bierbrier, Jessica Quebedeaux, Ashley Kester, Hayden Houser, Thomas Frederick, Zoe Poncher, Samantha Adams, Barry McGuire, Christian Nelson
Not Pictured: Jonah Gerstel

As of November 2017, our students were placed 65% industry, 15% graduate school. Below is the list of companies who hired the Class of 2017:

- Cerner
- Dow
- Georgia-Pacific
- Honeywell
- Quorum
- Schlumberger
- Cerner
- Daimler
- Evonik
- Highland Industries
- KMCO LLC
- Rain CII
- TRC Companies, Inc

2017 Department Awards

AIChe Activity Award:
Mary Kate Holleran
AIChe Senior Scholarship Award:
Yukihiro Kuruso
Francis M. Taylor Award:
Mary Kate Holleran
American Institute of Chemists Student Award:
Hayden Houser and Kate Roberts
Randall K. Nichols Award:
Quentin Boose
R. V. Bailey Teacher of the Year Award:
Dr. Katie Russell
Outstanding Teaching Assistant:
Meysam Shahami
Chevron Undergraduate Award:
Lauren Bartels and Sierra Lear
Student Practice School Award:
Jonah Gerstel, Emily Krzystowczyk, and Zoe Poncher

Every year seniors participate in different practice school projects. They can also elect to take service learning credit alongside Practice School. In 2017, we thank the following companies for their time and support in working with our students in Practice School and Service Learning:

Practice School:
American Sugar Refining Group
Phillips 66
Schlumberger
US Dept. of Agriculture
Westlake

Service Learning:
Electric Girls
Pine BioTech

2017 Department Awards Thank you Practice School Sponsors!
Congratulations to Our Newest Ph.D.s!

Dr. James Barnett
Hank Asbaugh, Advisor
“Supramolecular Assemblies of Deep-Cavity Cavities Stabilized by the Hydrophobic Effect”
Postdoctoral Research Scientist for Dr. Sunat Kumar Columbia University New York, NY

Dr. Moses Oguntoye
Noshir Pesika, Advisor
“Applying Vertical Aligned Carbon Nanotubes in Energy Harvesting and Energy Storage”
Process Technology Development Engineer at Intel Kenner, LA

Dr. Liang Tan
Lawrence Pratt, Advisor
“Molecular Theory and Simulation of Water-Oil Contacts”

Dr. Yueheng Zhang
Vijay John, Advisor
“Fabrication of Functional Materials through Interactions at Interfaces: from Polymer-lipid Rafts to Oxide Capsules”

Tulane University
Chemical and Biomolecular Engineering
6823 St. Charles Ave
300 Lindy Boggs Laboratory
New Orleans, LA 70118