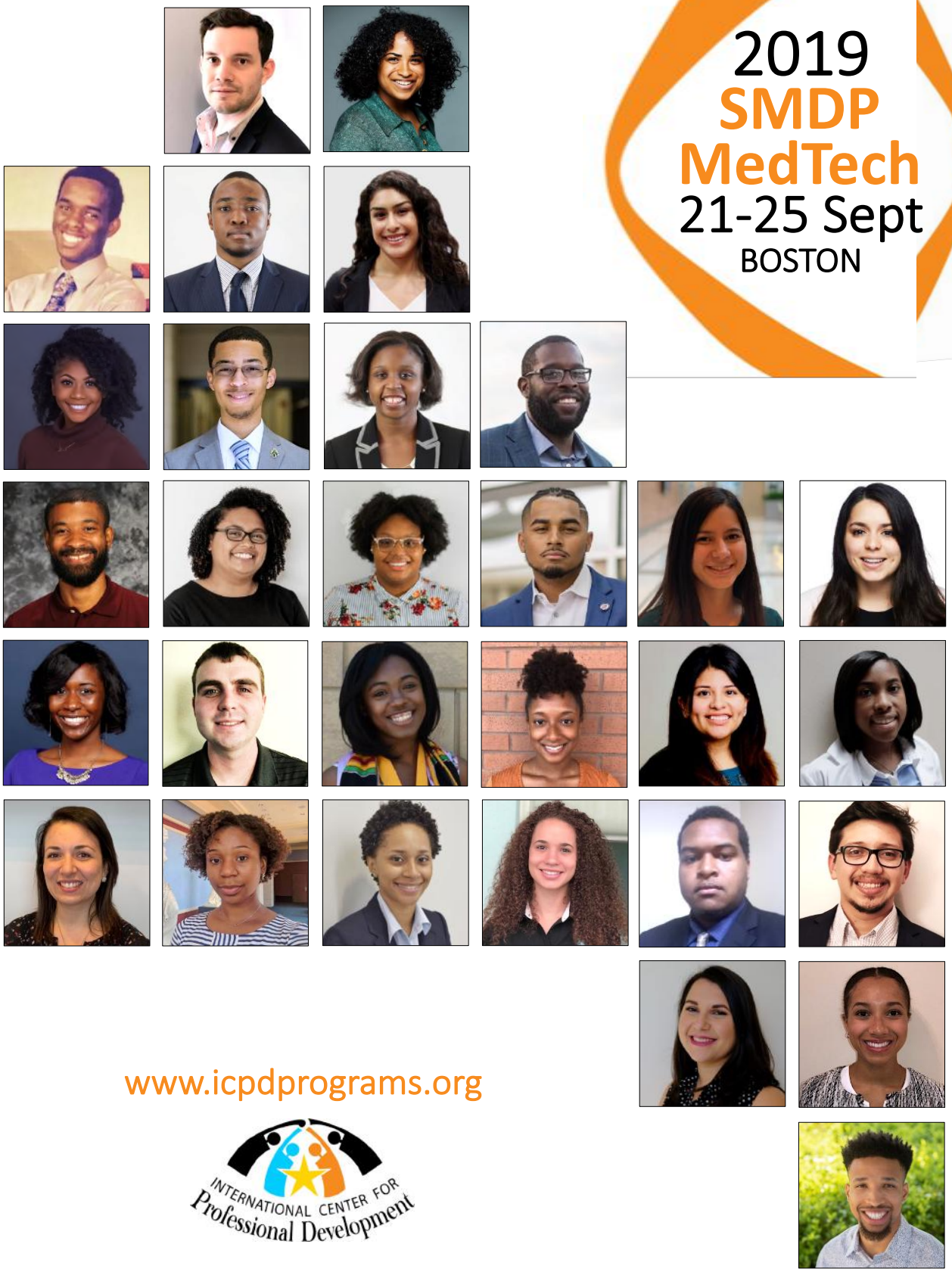
2019 SMDP MedTech

21-25 Sept

BOSTON



www.icpdprograms.org

INTERNATIONAL CENTER FOR Professional Development

2019 Scientist Mentoring & Diversity Program for medical technology (SMDP MedTech)

icpdprograms.org

Training Session

September 21-25, 2019 in Boston, MA

about the program who attends: the one-year career mentoring program pairs ethnically diverse post-baccalaureate students, graduate students and post-doctoral researchers with industry mentors who work at medical technology and consumer healthcare companies.

With their mentors, SMDP MedTech Scholars attend a 5-day training session to learn about opportunities in industry and receive career coaching. SMDP Scholars and Mentors also attend The MedTech Conference.

how to dress, what to bring: business attire with comfortable shoes. Scholars, bring 100 business cards and 10 copies of your resume. Mentors will need business cards too.

where to go:

Host Hotel

Mentors you will arrange your own accommodation
Scholars a shared room reservation has already been made for you at this location:

Element Boston Seaport
391 D Street, Boston MA 02210

"Celebration of Mentoring & Diversity" reception

(Saturday, September 1st at 6pm)
Scholars and **Mentors** you're already on the guest list

MIT Museum,
265 Massachusetts Avenue,
Cambridge, MA 02139

SMDP training session day 1

the bus leaves the host hotel at 6am
Scholars you will be introduced to your **Mentors** during the training session

DePuy Synthes,
325 Paramount Dr.,
Raynham, MA 02767

SMDP training session day 2

the bus leaves the host hotel at 6am

DePuy Synthes,
325 Paramount Dr.,
Raynham, MA 02767

Informal dinner

Scholars and **Mentors** you're already on the guest list, we leave DePuy Synthes at 5:30pm

Wahlburgers, 9th District Avenue, Boston, MA 02125

Site Visit

Medtronic **Mentors** and all SMDP **Scholars**

Medtronic, 100 Hampshire St, Building #3, Mansfield, MA 02048

The Boston Convention & Exhibition Center

registration information will be provided during the SMDP training session

Convention & Exhibitor Center,
415 Summer St.,
Boston, MA 02210

SMDP IS SPONSORED BY

Special thanks to the SMDP MedTech Outreach & Planning and SMDP MedTech Selection Committees

Saturday, September 21st:

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6–7pm	Reception: Celebration of Mentoring & Diversity in Medical Technology
7–8pm	Master of Ceremonies: Scott May, Executive Director, International Center for Professional Development (ICPD) Keynote: Peter Shen, Ph.D., Global Head, Research & Development, Johnson & Johnson, Medical Devices
8-9pm	Networking & Refreshments

Sunday, September 22nd: DePuy Synthes

7:30-8am	Registration & Breakfast Bus Leaves Host Hotel at 6am
8-8:15am	Welcoming Remarks Speaker: David Konieczynski, Snr. Director, Robotic Operations & Accelerations, Johnson & Johnson
8:15-10:15am	SMDP Intro & Scholar/Mentor Q&As Facilitator: Elisabeth Valerio, President, International Center for Professional Development (ICPD)
10:15-11am	Break (Group Photos)
11am-noon	Personalized Mentoring Facilitator: Elisabeth Valerio
Noon-1pm	SMDP Scholar & Mentor Lunch
1-1:45pm	Careers in the MedTech Industry Speaker: Lisa Berlin, Vice President Human Resources for Research and Development Johnson & Johnson Global Medical Devices
1:45-3pm	"Career Choices" Discussion Moderator: Scott May Panelist: Janette Edelstein, Sr. Director, Global Strategic Partnerships, Johnson & Johnson Consumer Panelist: Dan Groszmann, Ph.D., Sr. Manager Engineering, Final Product Technologies, Amgen Panelist: Annmarie Mullen, R&D LDP Engineer, DePuy Synthes Companies Panelist: Michelle Salvatore, Site Head EHS & Security, EMD Millipore
3-3:30pm	Break
3:30-4:15pm	Social Media Networking: Speaker: Colleen Albright, Senior Recruiting & Talent Consultant, Milipore Sigma
4:15-5pm	Getting Hired: Developing a High Impact Resume & Cover Letter Speaker: Lauren Celano, Chief Executive Officer, Propel Careers
5-5:15pm	Personalized Mentoring & Wrap Up
5:30pm	Bus Departs at 5:30pm to informal Dinner for all SMDP Scholars & Mentors

Monday, September 23rd: DePuy Synthes / Medtronic

7:30-8:15am	Bus Leaves Host Hotel at 6am Scholars & Mentors Breakfast Discussion: Career Goals & Action Items Mentor Debrief (SMDP Mentors 7:45-8am)
8:15-8:30am	Welcome by DePuy Synthes leadership
8:30-9am	Mentoring Portal Orientation Speaker: Dustielyn Savage, Programs Manager, International Center for Professional Development
9-9:45am	Getting Hired: Job Search Tools and How to Pursue Job Opportunities (Tips from Human Resource Insiders)
9:45-10:15am	Career Networking at Industry Events: An Introduction to *The MedTech Conference* Facilitator: Elisabeth Valerio
10:15-10:30am	Break
10:30-11:30am	Be the Most Memorable Person in the Room: Your Non-Verbal Advantage Speaker: Todd Fonseca, VP, Medtronic
11:30am-noon	Wrap Up & Evaluation
noon	Bus departs for Lunch and Site Visit at Medtronic (Scholars & Medtronic Mentors)
Afternoon	*The MedTech Conference* Registration Bus Departs from Medtronic at 2pm
	The MedTech Conference Sessions
5:30-7pm	*The MedTech Conference* Welcome Reception

Tuesday, September 24th: Boston Convention Center

7am	*Hotel Breakfast (on your own schedule)*: SMDP Scholars at Host Hotel
9am-12:30pm	*The MedTech Conference* Panels, Exhibits & Company Presentations
12:30-2pm	*The MedTech Conference*: (Hall B) Plenary Lunch
2-5:15pm	*The MedTech Conference* Panels, Exhibits & Company Presentations
3:45pm	*The MedTech Conference*: Afternoon Plenary (Hall B)
5-6:30pm	*The MedTech Conference:* Chairman's Networking Reception (Hall B)
7-10pm	*The MedTech Conference* Private Receptions/Dinners (invitation only)
8:30-10pm	AdvaMed MedTech After Party (Lawn on D)

Wednesday, September 25th: Boston Convention Center

	Hotel Check-out
8-9am	*The MedTech Conference:* Networking Breakfast (Hall B)
8am-2pm	*The MedTech Conference* Panels, Exhibits & Company Presentations
12:30pm-2pm	*The MedTech Conference:* Plenary Luncheon (Hall B)
2:15pm-4pm	Closing Plenary
Evening	SMDP MedTech Scholars Depart

2019 SMDP MedTech Scholars

Eva Andrews, Morehouse School Medicine

Eva Andrews graduated with a Bachelor's Degree in Biology from Salem College in Winston-Salem. She is currently a Research Assistant at Morehouse School of Medicine. Her studies investigate the role of sleep in behavioral responses to social stress. The goal of these studies is to understand the role of sleep in human pathologies including Post-Traumatic Stress Disorder (PTSD), bipolar disorder and major depressive disorder. Her studies use the mouse model to understand how sleep alters resilience to stress-induced maladaptive behaviors.

As an undergraduate, Eva completed an internship at Wake Forest School of Medicine studying the effect of chronic ethanol exposure on dopamine signaling and the role of calcium in this process. This study became the focal point of her undergraduate thesis. She has a strong desire to pursue topics in translational medicine with the potential for a global impact. Her short-term goal is to pursue her Doctoral degree at Morehouse School of Medicine. Her current research interests are the effects of social stress on the brain and involvement of the mesolimbic dopamine pathway in this process; she also has an interest in Alzheimer's research. Having come from a disadvantaged background, she is truly excited about a research career that will have a major impact on underserved communities.

Alejandro Arroyo, Ph.D., University of Pennsylvania

Alejandro David Arroyo Pacheco was born in San Juan, Puerto Rico and grew up in Guaynabo, PR. After obtaining his Bachelor of Science degree in Chemistry from the University of Puerto Rico at Rio Piedras, he pursued his Ph.D. in the Pharmacology Graduate Group at the University of Pennsylvania. In 2013, he joined the Delikatny Laboratory in the Department of Radiology in the Perelman School of Medicine. This laboratory focuses on the development of optical imaging agents, mostly aimed at fluorescence imaging. His tenure in the Delikatny lab exposed him to many imaging techniques used in the clinical setting such as: CT and PET imaging, fluorescence-guided surgery, MRI, and MR Spectroscopy, among others.

Alejandro recently defended his PhD in Pharmacology. His doctoral dissertation, titled Activatable probes for the imaging of biological parameters using Cerenkov radiation, focused on the development of the first-generation optical and nuclear imaging agents to study breast cancer metabolism *in vivo* using Cerenkov radiation. His project encompassed every part of the probe development pipeline; from probe design, synthesis, purification and characterization, to *in cellulo, in vitro, ex vivo* and *in vivo* studies to test the viability of the novel molecules. Currently, he works in the development of the second-generation of these imaging agents.

Aside from enjoying laboratory work, Alejandro is an avid reader of biographies and history books, especially American history. He also enjoys cooking, bike riding, swimming, and hiking. His career goals are to join industry as a part of a research team, lead a research group, and, ultimately, move into upper management.

René Arvizu, San Diego State University

René Arvizu was born and raised in the California Imperial Valley, in the small town of Calexico. He is a current Mechanical Engineering major with an emphasis in Bioengineering at San Diego State University. He began his passion for engineering while in middle school as part of the MESA (Mathematics Engineering Science Achievement) program, working as part of a team to accomplish STEM-related projects involving robotics and principles of physics. His calling, however, has always been to help others. He volunteered at his local hospital and soon realized that the best way to help others was through biomedical engineering.

He became part of many different organizations that helped and guided him towards his goal such as, LSAMP(Louis Stokes Association for Minorities Program), BMES (Biomedical Engineering Society), SHPE (Society of Hispanic Professional Engineers), 3D4E (3D Printing For Everyone), Sigma Phi Delta (Professional Engineering Fraternity) and the aforementioned MESA program. Being an active member of the organizations is how René found his place at SDSU and networked to learn about the multidisciplinary trend of engineering. This led to his next crucial stage of innovation research. He joined the Biomechanics lab and a year later, the Neural-MEMS (Microelectromechanical Systems) fabrication lab. René hopes to go into biomedical industry after graduating and plans to start a business in the future.

Ibrahima Bah, University of Rochester

Ibrahima Bah was born in Sierra Leone, where basic medical care and common medical devices are often unavailable. He witnessed firsthand the suffering this caused. After Ibrahima and his family were resettled to the US as refugees in 2001, his goal has been to better the lives of others through medicine and research. He plans to focus his career on medical device development and to improve medical care in low-resource settings.

Ibrahima earned his B.S. in Biomedical Engineering with a concentration in Mechanical Engineering at the University of Rochester. He worked on projects such as designing a bike telemetry wearable system that helps a team of cyclists with limited mobility safely and effectively communicate with each other during an endurance race. He has also

worked on projects that involved circuit design, CAD modeling, 3D printing, and computational analysis. To further his training, he then completed his Master's in Biomedical Engineering, where he evaluated pathology-associated mechanical changes in tendon by using an image-guided mechanical testing system to characterize the viscoelastic mechanical response of connective tissues.

In his free time, he enjoys mentoring students, volunteering with non-profit organizations, playing soccer, and basketball. Through the SMDP program, he is excited to enhance his professional development in the medical device industry.

Joshua Burnell, North Carolina Agricultural & Technical State University

Joshua Burnell was born in Lansing, Michigan and raised in Ashburn, VA. Joshua is a mechanical engineering student at North Carolina Agricultural & Technical State University, who serves as the NSBE Chapter Treasurer, Pi Tau Sigma Vice President, Toastmaster Treasurer, and works in the university makerspace. In his free time, Joshua enjoys cooking, taking dance classes, listening to spoken word poetry, and doing martial arts.

Joshua has participated in many unique experiences including internships, research, and projects. In 2017, Joshua interned for the Department of Defense's Army Educational Outreach Program, developing projects-based curriculums to introduce STEM to underprivileged youth. In 2018, he interned at Edward Lifesciences working on transcatheter heart valves as a research and development engineer. This past spring, Joshua worked with John Deere's regional office in Brazil to develop a strategy for educating agriculture workers in Sao Paulo about new sugarcane harvesting technology. Following this, he returned to the states to research at Johns Hopkins. The project he worked on tried to show how haptic feedback could be used to improve the performance of grasping and lifting task in myoelectric prosthetics. After graduation, he would like to enter the medical device field focusing on new product development. Joshua's areas of interest include medical robotics, prosthetics, surgical devices, and wearable technology.

Siena Calderon, San Jose State University

Siena is studying Packaging Engineering at San Jose State University and intends to graduate in Spring 2020. Her goal after she graduates is to work for a medical device company in a project manager position. Her current interest in the Medtech field ties in to her first years as an undergraduate student studying biomedical engineering. Though she did not continue with this course of study, her very personal relationship with medical devices has kept her pursuing a career in the same field (now with a different outlook).

Her current coursework at San Jose State includes courses in packaging materials, Artios CAD, medical device/pharmaceuticals packaging, solidworks and packaging machinery. During her studies, she has had various projects such as: conducting heat seal tests, burst tests, and tensile strength tests, and creating packages like blister packs and water bottles using Artios CAD. When Siena is not in the classroom or working as a nanny, she can be found cooking or enjoying a challenging workout. She is eager to attend the SMDP training session to learn more about what is new in the Medtech/packaging industry, as well as make new connections.

Nancy Dankwah, University of North Texas

Growing up in a very traditional Ghanaian household, Nancy Dankwah was exposed to the intricacies and work ethic of both Texan and Ghanaian cultures. Integrating these with her love for music, medicine, and nature, she was able to create a realm of her own throughout her primary and secondary years. Adding a newfound love of math and philosophy to the mix, Nancy has found ways to integrate her niches into her day-to-day life, whether it be through her interests and work in regenerative medicine, her musical work in A&R and event booking, or through her philanthropic work throughout her community. Deeply in love with her major of Biomedical Engineering, Nancy hopes to continue her education and pursue her MD-PhD in the same field and hopefully conduct research on the stem cell regeneration of neuroblasts and osteoblasts in patients such as athletes. Furthermore, Nancy hopes to start a foundation for students who are low-income, first generation students like herself to help get them the support and aid needed to better them and their families' lives.

Maximilien DeLeon, Rice University

Originally from Upper Marlboro, Maryland, Maximilien DeLeon is a recent Bioengineering graduate from North Carolina A&T State University. He enjoys giving back to his community and helping people whether it is helping plant trees or registering people to vote. Max discovered his interest in medical devices when he interned with Boston Scientific in their Research and Development Department. It was phenomenal seeing medical devices and the design process that goes into each one. Max believes that the bioengineering and medical device field has so much potential and he wants to be part of it.

Currently, Max is in his first semester at Rice University as a Bioengineering graduate student. Although the destination for his career is still being calibrated, Max is certain that it will be in the field of medical devices. Through SMDP, Max wishes to learn more about careers in the industry and gain more insight into what role he will be pursue.

Rayonna Gordon, Wake Forest University

Rayonna Gordon is a graduate student in the Virginia Tech – Wake Forest University School of Biomedical Engineering and Sciences. She received her Bachelor of Science in Bioengineering with a minor in Public Relations from North Carolina A&T State University in Greensboro, NC. During her undergraduate career, Rayonna interned at Cook Medical in Bloomington, IN in the Peripheral Intervention division. She also was a research intern at the Naval Research Laboratory in Washington, DC working in Biofabrication.

Currently at Wake Forest University in Winston Salem, NC, Rayonna is researching medical equipment solutions for remote and poor-resourced facilities, specifically focusing on developing countries. Upon receiving her Master of Science in Biomedical Engineering in May 2020, she plans to pursue a career in industry designing medical equipment and devices that cater to underrepresented populations in the United States and around the world. Rayonna wishes to utilize and build on her leadership and communication skills to eventually direct teams dedicated to this same goal.

Vaughn Greene, Stony Brook University

Vaughn Greene Jr. graduated from Skidmore College in 2008 with his B.S. in biology and then pursued his PharmD until he spoke with a pharmacy technician who expressed his desire to pursue a degree in biomedical engineering. After some research, he became fascinated by this field and its ability to contribute to society in a unique way. Vaughn left pharmacy school and went on to obtain his B.E. in Biomedical Engineering from the City College of the City University of New York.

During his time at the City College, Vaughn researched the use of biopolymers as tracheal mimics, in addition to fabricating nanoparticles as a drug delivery system for cancer treatment. Currently, he is a graduate student at Stony Brook University where he has completed a Master's in Biomedical Engineering and is pursuing a PhD in Biomedical Engineering.

As a PhD student, Vaughn is researching the role that biomaterial's mechanical properties play on cell interaction and its growth. To do this, he uses the scaffold fabrication methods of electrospinning and 3D-bioprinting to make scaffolds that mimic extracellular matrix (ECM). Through understanding the micro level interactions of a cell and the synthetic ECM, he hopes to regenerate organs for patients waiting on a never-ending organ transplant waiting list.

Vaughn recently also became intrigued with the idea of simple ideas turning into products on the market. Now, Vaughn aspires to make an impact with his research not only in the academic world, but in the world at large. When Vaughn is not busy with his research, he loves to mentor others. He follows this passion by being a part of the Community of Student Mentors program and the CIE/EOP Mentoring Initiative for Success offered through the Center for Inclusive education at Stony Brook.

James Headen, North Carolina Agricultural & Technical State University

James Mckeather Headen is a third-year Ph.D. student and an HBGI Title III Chancellor Distinguished Fellow in the Computational Sciences and Engineering Department at North Carolina A&T State University where his research interests bridge human behavior identification, biometrics, and biomechanics. Specifically, his research investigates the detection of violent abnormal behavior by examining the correlation of static posture, kinematics, and intention. He obtained a BS and an MS degree, both in Applied Mathematics, from Elizabeth City State University where he was a Dwight Eisenhower Fellow. In his spare time, he enjoys hiking, camping, and entrepreneurship.

Taylor Johnson, The University of Texas at Austin

Taylor Johnson is currently a 5th year undergraduate student at The University of Texas at Austin. She is majoring in Biomedical Engineering with a specialization in Molecular, Cellular, and Tissue Biomechanics. During her time at UT Austin, Taylor has worked as an undergraduate researcher in the Rehabilitation and Neuromuscular (ReNeu) Robotics Lab, where she has collaborated on projects such as the Harmony Exoskeleton and the Maestro Hand Exoskeleton, both of which were designed to aid in rehabilitation for stroke and spinal cord injury patients. Along with this, Taylor has worked as a peer advisor for the UT Biomedical Engineering Department for nearly 4 years. In this role, she has provided guidance on navigating the curriculum and shares her personal experiences as a BME student with current students, prospective students, and families that visit the department.

Throughout her undergraduate career, Taylor has served two terms as president of the Biomedical Outreach and Leadership Team, which is an organization focused on increasing K-12 STEM outreach through organizing and teaching after-school science clubs for Austin area elementary schools and hosting student panels at prospective student sessions for UT BME. This past summer Taylor worked as a mentor for the National Society of Black Engineers (NSBE) Summer Engineering Experience for Kids program in Atlanta, Georgia where she taught a class of 18 fourth grade girls about engineering concepts, such as airplanes, electrical circuits, and coding.

Following graduation, Taylor hopes to pursue a career in either industry or higher education with a focus on outreach and increasing the recruitment and retention of underrepresented minorities in STEM fields.

Kiara Lacy, University of California, Irvine

Kiara Lacy, commonly known by her nickname "Bubbles", is currently a 2nd year undergraduate Chemical Engineering student at the University of California, Irvine. She is also a proud member of Alpha Phi Omega and the National Society of Black Engineers. Supporting her community and peers has always been a motivation that she possesses, and it shows in her drive for involvement in school. Her favorite club to take part in was Key Club, which is an organization created to give back to the community, from adults and children in hospitals to teaching a classroom of children how to properly care for a garden. Similarly, she was also interested in science and discovering the underlying principles that govern the way that the world works. Thus, she joined her school's robotics team and was a builder for two years.

After years of being a member of the two clubs her junior and senior year, her goal was to join a field that would allow her to impact as many people as possible. Therefore, she combined her love for mathematics and chemistry with her passion for caring for the wellbeing of others and found her way to Chemical Engineering. It allowed her to be flexible with her interests and provided her with a large range of topics to choose between. After communicating with faculty and doing personal research, her current interests lie in water treatment, reduction of greenhouse gas emissions, and creating cleaner environments to prevent the spread of diseases and infections. The topics vary, but they all contain the goal to help people that live in unsanitary locations have better living conditions or fight back against factors that are damaging the earth and those inhabiting it.

Maurice Lathan, Ohio State University

Maurice (Moe) Lathan Jr. is a native of Cambridge, Ohio. He is currently a fifth-year student at Ohio State University studying Health Science and Biology. Maurice's future aspirations post-graduation include attending medical school and pursuing a career as a doctor in an undeserved community. He also plans to research health disparities and infections/chronic diseases that affect the black community. Maurice's passion is to help others reach their full potential. "If you're always trying to be normal you will never know how amazing you can be" -Maya Angelou

Lenitza Lopez, University of Pennsylvania

Lenitza M. Nieves-López is a PhD Candidate from the department of Biochemistry and Molecular Biophysics at the University of Pennsylvania in Philadelphia, PA. She obtained a bachelor's degree in chemistry at the University of Puerto Rico in Mayaguez, where she is originally from. As an undergraduate student she obtained some experience in the medical technology industry where the interest in this field started. After obtaining her bachelor's degree, she decided to pursue a PhD in a biomedical science program to further expand her knowledge in this field. Together her experiences have shaped her interest in exploring different career opportunities in the medical technology industry.

Marysol Luna, Cornell University

Marysol Luna was born and raised in Nogales, Arizona- a town bordering Mexico. She earned her Bachelor of Science degree in biomedical engineering from the University of Arizona in 2015. Marysol will be starting her 5th year as a PhD candidate in mechanical and aerospace engineering at Cornell University in the Hernandez Research Group. Her research investigates how alterations to the gut microbiome can directly or indirectly influence 1) the development and severity of post-traumatic osteoarthritis, and 2) increase the risk of osteoporotic fractures due to a decrease in bone strength and alterations to bone material properties.

With her research, Marysol hopes to find a link between the microbiome and bone/joint health. Marysol is passionate about biomechanics and orthopaedics. She hopes to conduct research in industry after earning her degree.

Marysol is an NSF GRFP Fellow, Sloan Fellow, Bouchet Honor Society Scholar and an SMDP Biotech Scholar. She has enjoyed serving as a teaching assistant for her department, being involved with the Society of Hispanic Professional Engineers, and introducing children to robotics through an after-school program. In her spare time, Marysol enjoys traveling, exploring new cuisines, baking, watching new shows and hiking.

Sha'Kayla Nunez, Morehouse School of Medicine

Sha'Kayla Nunez is a native of Houston, TX, and is currently a third year PhD candidate at Morehouse School of Medicine. Her research interest is in colorectal cancer (CRC) with a specific focus of combating chemokines and chemokine receptors as key driver markers in CRC disease progression. Her work primarily focuses on how chemokines serve as a driver for CRC metastasis and progression by identifying gene networks and transcription factors that are activated following chemokine responsiveness.

Prior to entering the PhD program, Sha'Kayla completed a Master of Science Degree in Biomedical Research at Morehouse School of Medicine. Her thesis focused on the role of RBP-JK in leptin-induction of breast cancer progression and chemoresistance. Her contribution demonstrated that the loss of RBP-JK in cancer cells resulted in increased cell proliferation and chemoresistance. Her early research involved environmental research which focused on lead and arsenic contamination which was conducted while obtaining a Bachelor of Science degree in Chemistry at Dillard University. This work demonstrated the ability of charcoal, unbrewed coffee and tea, fishbone, and caffeine to remove lead from contaminated aqueous solution.

Outside of academia, Sha'Kayla is actively involved in community health awareness, mentoring, and educational programs with her sorority, Delta Sigma Theta Sorority, Inc. She serves as a student leader working with curriculum department chairs and associated personnel to create strategic plans to improve the Graduate Education curriculum at Morehouse School of Medicine and she is also a member of the Georgia Bio Emerging Leaders program, serving as a student liaison. Her additional memberships include the American Association for Cancer Research and the American Association of Immunologist. Her career aspirations are to work closely with research and government to generate ideas for new research methods geared towards clinical trials, immunoprevention, and translational science projects that apply results to cancer research as it relates to drug development and medical devices.

Sean Ortiz, San Diego State University

Sean Ortiz is completing his final semester at San Diego State University where he is studying Mechanical Engineering with an emphasis on Bioengineering. His capstone senior design project is focused on converting a stereolithographic 3D printer to be capable of producing biological scaffolding with aligned fibers. At San Diego State University, Sean has been part of the Cardiovascular Bioengineering Lab for the past three semesters where he works on an industry-sponsored project by Abbott studying the HeartMate 3. Sean has held leadership positions in several student run organizations including President of Biomedical Engineering Society and Founder/Vice-President of Quality of Life Plus.

Sean's industry experience has solely been in the start-up space. This past summer Sean was an Advanced Development intern at Nuvera Medical, a Shifamed Portfolio company, focusing on the electronics of their 4D ICE Catheter. Before this experience, Sean had three orthopedic internships working in the Quality Assurance and Manufacturing departments at Ceterix Orthopaedics (acquired by Smith & Nephew) as well as interning in Research & Development at b-ONE Ortho Corp. His long-term goal is to develop innovative and disruptive technologies in the cardiovascular field. Sean was raised in Palo Alto California and enjoys playing sports, going to the beach with his friends, and traveling in his free time.

Kenzhané Pantin, University of Illinois at Urbana-Champaign

Kenzhané Pantin attended the University of Central Florida, where she received her Bachelor of Science degree in Psychology. During her junior year she interned at Ohio State University in the Mood and Personality Lab and studied the efficacy of dialectical behavioral therapy on individuals with bipolar disorder.

Currently, she is a Personality Psychology PhD Candidate at the University of Illinois at Urbana-Champaign and studies topics related to sexual wellbeing and behavioral genetics. Her most recent project has been with the National Institutes of Health where she has examined families genotyped for *BRCA1/2* germline mutations to determine if there are additional cancers related to the disease. In her spare time Kenzhané enjoys anime and hiking.

Alexis Pena, Johns Hopkins University

Alexis is a 3rd year Biomedical Engineering PhD student at the Johns Hopkins University in the Translational Tissue Engineering Center (TTEC). Her research focuses on studying the adaptive immune response in the context of tissue regeneration for developing regenerative therapies. Her work is supported by the NSF-GRFP fellowship. Alexis is originally from Durham, NC. She completed her undergraduate studies at Syracuse University and received a BS in Biomedical Engineering.

Xiomara (Isabel) Perez, Rutgers University

Xiomara (Isabel) Perez is a 4th year PhD Candidate in Biomedical Engineering (BME) at Rutgers University. Isabel also received her BS and MEng in BME from Rutgers University. She has been actively involved in scientific research since her sophomore year. Her undergraduate research focused on developing a rapid mineralization technique for synthetic long-bone scaffolds. Currently, her thesis project involves developing an injectable hydrogel-nanoparticle drug delivery vehicle for long-lasting, localized delivery of bioactive molecules, which are essential in enhancing recovery following Traumatic Brain Injury.

Aside from research, Isabel is highly involved within the community as an advocate for diversity and inclusion as well as scientific communication and awareness. She is currently an executive board member for the STEM Community Outreach Symposium at Rutgers, which is coordinated by over a dozen STEM graduate student organizations at Rutgers. In addition, she has been an executive board member of various organizations across campus which focus on increasing diversity and inclusion in STEM. Furthermore, she is currently working at Bristol-Myers Squibb as a Process Engineering Co-Op in the Parenteral Manufacturing Science & Technology group until the end of December 2019. Upon graduation, she strives to become an influential leader in the biotechnology and biopharmaceutical industry.

Demisha Porter, Virginia Polytechnic Institute & State University

Demisha Porter is currently investigating the human brain. As an undergraduate student, she contributed towards a study that utilized RNAi to determine novel genes linked to nicotine and Parkinson's disease. She was also a scholar in the VCU Postbaccalaureate Research Education Program focusing on traumatic brain injury (TBI) and furthering understanding of secondary insults resulting from TBI for the development of effective therapeutics.

Demisha is currently a neuroscience PhD candidate in the Translational Biology, Medicine, and Health program at Virginia Tech, where her research interests focus on using biomedical microdevices and molecular biology to study neurogenesis and peripheral nerve injury.

During her first year of graduate school, Demisha developed a strong passion for understanding commercialization, and integrating academic innovations with entrepreneurial spirit. Thus, she participated in the Health, Science, and Technology Commercialization Fellowship at VTCRI as well as co-founded OcuBloc- a medtech startup to solve current problems in modern cell-based therapy and drug discovery.

Izmarie Poventud-Fuentes, University of Pennsylvania

Izmarie Poventud-Fuentes obtained her bachelor's degree in Industrial Biotechnology from the University of Puerto Rico - Mayagüez. Since college, she has engaged in several research opportunities at the interface of Biology and Engineering, which fueled her interest in interdisciplinary work. Specifically, she has contributed to projects that use engineering approaches to address questions related to drug delivery, biomarkers assessment, cancer microenvironment, and blood clot physiology. Now, she wants to apply her research experiences to develop technologies to improve the precision of patient diagnosis, treatment, and wellness.

Currently, Izmarie is pursuing her Ph.D. in Pharmacology at the University of Pennsylvania. For her thesis project, she developed a microfluidic device that mimics a blood vessel to study blood clot formation. This tool can be used to examine the differences between physiological (i.e. stop bleeding) and pathological (i.e. cause heart attacks and strokes) blood clot formation, and to screen for drugs that prevent pathological blood clot formation without causing bleeding complications. At Penn, she also engages with the community through the Penn SACNAS Chapter and Pharm4GOOD. As part of these initiatives, Izmarie has developed leadership and teamwork skills, and has had the opportunity to promote science through educational outreach activities. Furthermore, she has developed a strong commitment to fostering mentorship and diversity in STEM careers and to advocate for the academic and professional development of the younger generations of scientist.

Lexi René, Florida State University

Lexi René is Canadian born, Brooklyn raised artist, problem solver, a first- generation educator, and most importantly, a self- made innovator. She first began her education in New York City, attending the top performing arts schools majoring in vocal performance throughout her primary and secondary education. During her time at CUNY Brooklyn College, she became the first mathematics scholar of both the NIGMS Research Initiative for Scientific Enhancement program and later the NIGMS Minority Access to Research Careers program.

While pursuing her masters, she interned as a machine- learning researcher at the Zuse Institute of Berlin in the summer of 2015 sparking her curiosity in the field of data science. In 2016 Lexi graduated from Emory University, Rollins School of Public Health with a Master of Science in Public Health and a concentration in biostatistics. Today, Lexi is a doctoral candidate at Florida State University majoring in Statistics, teaching undergraduate level introductory statistics courses, and has interned in industries such as government, pharmaceutical, and academia, as a data scientist.

Krystal Roggerson, Morehouse School of Medicine

Krystal Roggerson's long-term career objective is to integrate translational science and diagnostic testing strategies to address the growing health disparities in obesity-related cardiovascular diseases in minority populations. She has established a strong foundation in biological and translational sciences throughout her undergraduate and graduate coursework, along with extensive research experience in areas ranging from molecular biology to clinical research.

While attending Hampton University, Krystal was accepted into a two-year undergraduate scholarship program by the Maximizing Access to Research Careers program which afforded her the opportunity to conduct biomedical research. She completed the Summer Research Internship Program at the University of Virginia where she gained valuable experience in molecular biology techniques such as aseptic cell culture, Western Blot analysis, and quantitative reverse transcription PCR. Her research focused on establishing a mechanism through which the Hepatitis C virus impairs Natural Killer cellular function to clear HCV infection leading to her first co-authorship publication (Goh et al., 2016).

Currently, as a doctoral student at Morehouse School of Medicine (MSM), Krystal is investigating the cellular mechanisms that contribute to the progression of obesity-related vascular dysfunction. She is also completing the Certificate Program in Translational Research (CPTR) at Emory University to expand her knowledge in translational research. The training she received from MSM has instilled in her the importance of career development through activities such as presentation skills, critically mastering the literature, statistical analysis, biomedical ethics, and exploring various career options. Krystal believes that attending the 2019 SMDP MedTech Program will expand her knowledge in careers in the medical technology and consumer healthcare industries and further her pursuit to achieve a long-term goal of becoming a translational biomedical research scientist in the area of cardiovascular health. Outside of research, Krystal is actively involved in MSM school activities such as serving as the 2018-2019 Graduate Education Biomedical Sciences Student Liaison as well as several community service activities. She also enjoys cooking, spending time with family, and traveling.

Keyzamar Roman, University of Puerto Rico, Mayaguez Campus

Keyzamar L. Roman-Ramirez was born in Puerto Rico and is an undergraduate junior in Industrial Microbiology at the University of Puerto Rico, Mayagüez Campus (UPRM). She works as an Agricultural Land Assistant at Finca Alzamora where she performs grafting, cutting, and seeding and offers customer service in the sale area. Her interest in the scientific world began after eighth grade when she took Anatomy and Physiology class at Moravian College in Pennsylvania. It was there, along with her previous participation in science fairs, that she discovered her passion for plants and biomedical sciences.

Keyzamar is the President of the Future Association of Clinical Laboratory Professionals, where she has gained experience in health and medical techniques. She also has gained hands-on experience with medical technologies in a Clinical Reference Laboratory through a special program called COOP Practicum. Keyzamar's undergraduate research involves working on Chemistry Education of Antibiotics developing extraction, purification, and isolation of organic compounds in aromatic plants' leaves and testing which ones have antibiotic properties. This summer, she entered the Chicago Botanic Garden's Research Experiences for Undergraduates internship program where she collaborated with a PhD student studying the ecology of native annual plants from California and mentored a high school student in scientific research.

One of Keyzamar's biggest goals is pursuing a Doctor of Philosophy (Ph.D.) degree related to healthcare research, research which involves developing new innovative natural treatments that can be combined with conventional medicine to achieve better results for patients. In addition to her professional and academic undertakings, her hobbies are dancing, crafting, painting, baking, photography, gardening, volunteering with animal rescue and foster programs and exploring new places and cultures. Keyzamar believes that awareness of the natural world and helping others in need is essential for creating the quality of life that all living beings deserve.

Trevor Surratt, North Carolina Agricultural & Technical State University

Trevor Surratt was born and raised in Maryland and is 4th year undergraduate student at North Carolina Agricultural and Technical State University (NCAT). He currently is studying Bioengineering with a minor in Biology. During his sophomore year, Trevor was selected to join Maximizing Access to Research Careers (MARC) Undergraduate Student Training in Academic Research (U-STAR). During his time in MARC U-STAR he worked in a lab that focused on identifying the proteins that are responsible for the process of either aging or injury repair of skin. He also participated in summer research experience for undergraduates during his previous three years at NCAT, Wake Forest Baptist Medical Center, and University of Texas at Austin respectively. During his stay at Wake Forest Baptist Medical Center his accomplishments warranted him a middle author spot on the publication "Tumour-specific amplitude-modulated radiofrequency electromagnetic fields induce differentiation of hepatocellular carcinoma via targeting Cav3.2 T-type voltage-gated calcium channels and Ca2+ influx". During his off time, Trevor helps run the makerspace at NCAT to assist student in developing innovation and critical thinking processes.

David Swain, University of Toledo

David Swain is from Ypsilanti, Michigan, and was first introduced to medical technologies as a high school freshman, when his father got sick with kidney failure due to his diabetes. He was put on dialysis and after seeing how his father's quality of life dramatically decrease and the strain it put on the family, he decided to pursue a career in biomedical engineering in hopes of eliminating the need for dialysis.

David attended the University of Toledo where he majored in Bioengineering with a minor in Business Administration/ Management. During his time at the University of Toledo he completed 5 internships/ CO-OPs at 4 different medical device companies (Cook Medical, K2M Complex Spine Innovations, Olympus Surgical Technologies, and Edwards Lifesciences). He graduated in May of 2019 and recently began working at Edwards Lifesciences in their Technical Development Program on the clinical engineering team.

David's goal is to be a disrupter in the medical technologies space and create better solutions for renal patients around the world. He is passionate about making health care more affordable and available to underserved populations, and he is an active member of NSBE! He strives to encourage young black students to take an interest in STEM related career paths. David enjoys playing ultimate Frisbee, working out, riding bikes, listening to music, and he loves football!

Elda Treviño, Georgia Institute of Technology

Elda Treviño is a doctoral candidate in the Biomedical Engineering department at the Georgia Institute of Technology in Atlanta, Georgia. Originally from the border-town of Laredo, Texas, Elda received her Bachelor of Science degree in Biomedical Engineering from The University of Texas at Austin. Her research investigated how mesenchymal stem cells contributed to neovascularization *in vivo* following hind-limb ischemia through the use of photoacoustic imaging with gold nanoparticle contrast agents. This work resulted in several presentations at national conferences (including the Biomedical Engineering Society) and a second author publication titled "Gold Nanoparticle Monitoring of Mesenchymal Stem Cells for *In Vivo* Applications Related to Ischemic Repair."

Elda continued her pursuit of knowledge by enrolling at the Georgia Institute of Technology to pursue her Ph.D. in Biomedical Engineering. Elda's graduate work focuses on understanding how several families of proteases contribute to joint tissue degeneration follow rotator cuff tear. Additionally, Elda is investigating biomaterials to locally deliver therapeutics to inhibit protease activity and prevent joint tissue degeneration. Elda has presented her work at several national conferences (including the Tissue Engineering and Regenerative Medicine International Society and the Society for Biomaterials) and published a first-author manuscript titled "Full-thickness rotator cuff tear in rat results in distinct temporal expression of multiple proteases in tendon, muscle, and cartilage." In her spare time, Elda enjoys spending time with family and friends, trying new restaurants, and reading novels in an overstuffed chair.

Ruby Washington, University of Pennsylvania

Ruby Washington is a junior studying Bioengineering at the University of Pennsylvania. Her interest in this field began in high school when she attended the BIOMED Summer Academy at Drexel University. This past summer, Ruby was selected to participate in the National Science Foundation / Louis Stokes Alliance for Minority Participation Undergraduate Research Program (NSF/LSAMP) at Penn. During this program, she worked in a research group that focused on fabricating micro-porous elastomers for applications in smart windows and medical devices.

On campus, Ruby is the secretary of Penn's chapter of the National Society of Black Engineers (NSBE) and a member of Theta Tau Professional Engineering Fraternity. Through these activities, she is able to develop a sense of community and collaborate with other like-minded individuals. In her free time, Ruby enjoys cooking and traveling.

Ruby seeks to find intersections between her interests in biomaterials and medical devices, and to find her niche working on emerging technologies.