



DREXEL UNIVERSITY

School of

Biomedical Engineering,  
Science and Health Systems

# 2017

## COMMENCEMENT

AND

## HONORS CEREMONY



# COMMENCEMENT AND HONORS CEREMONY

Monday, June 12, 2017 – 9:00 AM

Main Building Auditorium

*(Main Building Auditorium is located at the corner of 32nd and Chestnut Streets)*

## Program of Events

### PROCESSIONAL

Order of Procession: Faculty, PhD, MS, and BS

### NATIONAL ANTHEM

Kenneth A. Barbee, PhD (leading on trumpet)

### INVOCATION

Rev. Brian Musser, Baptist Campus Ministries

### PRESIDENT'S REMARKS

John A. Fry, President

### DEAN'S WELCOME

Paul Brandt-Rauf, ScD, MD, DrPH, Distinguished University Professor and Dean

### DISTINGUISHED ALUMNI AWARD

*In recognition of an alumnus who has personified the traditions of excellence of the School of Biomedical Engineering, Science and Health Systems and the University through their personal accomplishment, professional achievement, and/or humanitarian service.*

◇ Awardee: **Nicholas Pashos, BS '11**

### KEYNOTE ADDRESS

Nicholas Pashos, Founder and CEO, BioAesthetics

### STUDENT AWARDS AND RECOGNITIONS

Latin Honors

Graduate College Awards

Co-op Awards

### SENIOR DESIGN TEAM AWARDS

*Recognizing the team finalists who presented their Senior Year final capstone projects at the Drexel University School of Biomedical Engineering, Science and Health Systems and College of Engineering Senior Design Competitions.*

- ◆ First Place Team (BIOMED Competition): Anti-Kink Custom-Curve Endotracheal Tube Stabilizer – **Sarah Julius, Bryan Melilli, Emily Qian, Luke Raymond, and Victoria Sadowski** / Advisor: **Ken Barbee**
- ◆ Runners Up (BIOMED Competition):
  - ◇ Design of Electrospinning System for Control of Nanofiber 3D – **Brandon Eng, James Kirwan, Alex Mariner, Ravi Shah Michael Shmukler, and Brendan Sweeney** / Advisor: **Lin Han**
  - ◇ Radial Inlet Volute Design for a Pediatric Centrifugal Cardiac Pump – **Sherika Gordon, Sarah Haynes, Jennifer Patten, Khyati Prasad, and Ashley Ramirez** / Advisor: **Ray Throckmorton**

- ◆ Peer Choice Award (BIOMED Competition): Anti-Kink Custom-Curve Endotracheal Tube Stabilizer – **Sarah Julius, Bryan Melilli, Emily Qian, Luke Raymond, and Victoria Sadowski** / Advisor: **Ken Barbee**

### **THE ELISABETH PAPAZOGLU INSPIRED LEADERSHIP AWARD**

*In recognition of an individual who demonstrates exceptional abilities to lead, serve, collaborate, and inspire with broad impact and special distinction.*

- ◇ Awardee: **Dov Jaron, PhD**

### **DISTINGUISHED SERVICE AWARD**

*In recognition of outstanding service by a member of the University community in supporting our students and advancing the missions and ideals of the School of Biomedical Engineering, Science and Health Systems.*

- ◇ Awardee: **Kenneth A. Barbee, PhD**

### **GREETINGS FROM THE CLASS OF 2017**

Arpit Shah

### **INDIVIDUAL RECOGNITION OF GRADUATES**

Reader of Graduate Names – **Kara Spiller, PhD**

Reader of Undergraduate Names – **Jaimie Dougherty, PhD**

### **SALUTE TO PARENTS, FAMILIES, AND FACULTY**

Fred Allen, PhD

### **RECESSIONAL**

Order of Recession: BS, MS, PhD, and Faculty

### **PHOTO OF GRADUATING CLASS**

## GRADUATING CLASS OF 2017

Undergraduate Students  
BS in Biomedical Engineering

Angeline May Aguinaldo	Nathan Tessema Ersumo
Alice E. Alderson	Peter Carl Esslinger
Abdelrahman Z. Aleies	Adam Raymond Ferreira
Jonathan S. Amora	Valeria Beckhoff Ferrero
Anmol Rajesh Arora	Daniel P. Finnegan
Mohan V. Avula	Kelly N. Fox
Eric Anthony Barbalace	Samantha Roxanne Fox
Liam P. Barnes	Eliza Kathleen Fredette
Michael Robert Bene	Melissa A. Frendo-Rosso
Justin T. Bernauer	Matthew T. Geib
Nsilo Idrissa-Ashley Berry	Tushaar S. Godbole
Matthew C. Bova	Randy S. Goldfarb
Christopher Phillip Brennan	Sherika A. Gordon
Stephen Mitchell Brown	Jaclyn Taylor Goulet
Jordan Edward Bucher	Allison M. Grasmeyer
Edgar Cardenas	Seth Mitchell Greber
Samantha Emily Cassel	Margaret Louise Gunn
Nicholas Chen	Sarah E. Haynes
Chung Cheng	Murynia Nena Hernandez
Luyando Chibwe	Kristin Marie Irons
Tiffany Chiu	Sean Michael Jenkins
Kalgi Chokshi	Muammar Abdullah Johnson
Kelsey Yoonsun Chung	Tara Rose Jordan
Galen Talbot Clarkin-Wright	Andrew Abraham Joseph
Christopher D. Cox	Ajo Isak Joseph
William C. Dackis	Sarah C. Julius
Yoseph Warren Dance	Eshiemhomo E. Kadiri
Yiyang Deng	Priyanka J. Karekar
Ayan Nimish Desai	Tyler Wade Kern
Eric Pascal Dluhy	Samuel M. Kim
Thomas J. Donnelly	James Alan Kirwan
Megan Elizabeth Donohue	Michael David Koerner
Darshan Donthi	Kosha Kumar
Emily B. Du	Kevin M. Kunju
Melissa Renee DuBois	Kanghee Lee
Raymond Palmer Dulman	Tyler Kevin Lee
Brandon Tyler Eng	Dalton J. Lester



## GRADUATING CLASS OF 2017

### Undergraduate Students BS in Biomedical Engineering

Thomas F. Lightfoot-Vidal	Gabriela De Jesus Rovi
Allison Blaise Liptak	Dennis Roy
Jonathan R. Lolli	Alicia A. Rusnak
Marina Y. Louis	Victoria M. Sadowski
Xinyi Lu	Justin Q. San Juan
Anna H. Lu	Samantha Elise Santos
Haiyue Lu	Ravi Shah
Dimitri C. Madonis	Sunil Shah
Leif Eric Malm	Derek A. Sheesley
Ashley Rose Malone	Michael Gregory Shmukler
Josue David Manjarrez Linares	Joseph T. Sincavage
Alexander Richard Mariner	Sheharyar Sohail
Bryan J. Melilli	Angelica Spinelli
Tyler William Miller	Adam David Still
Neil Mittal	Brendan Daniel Sweeney
Trevor W. B. Montez	Michal Swoboda
Carli Ann Moorehead	Mashaal M. Syed
Ashley K. Moy	Cheryl Su-Wen Tang
Mohana H. Nagda	Neha Thomas
Aakansha Nangaria	Gregory Rocco Toci, Jr.
Alexandria Leigh Neiman	Beverly E. Tomita
Olivia Ngo	Gabrielle Toner
Arlene Genevieve P. Offemaria	Uyen Phuong Tran
Durand J. O'Meara	Anh N. Trinh
Rea Parikh	Cassandra Tu
Stephen James Parsons, Jr.	Bairavi Venkatesh
Neel Patel	Michael Reed Vennel
Sohil Shashikant Patel	Kathryn Claire Volk
Jennifer W. Patten	David I. Weinstock
Khyati Prasad	Loveena Williams
Emily Qian	Chanel Amanda Wong
Cory Evan Quigley	Wenyu Xin
Ashley Vanessa Ramirez	Kevin Robert Yeamans
Luke Matthew Raymond	Emrecan Yener
Yerram Pratusha L. Reddy	John D. Yockey
Todd R. Roescher	Anthony Justin Young

# GRADUATING CLASS OF 2017

## Graduate Students MS in Biomedical Science

Jessica Mary Eager  
Prince Jacob

Brinda Mahendrasinh Kamalia  
Julia Elizabeth Orchinik

## MS in Biomedical Engineering

Mohannad Abboushi  
Andrew Francis Ardire  
Eric Anthony Barbalace  
Christopher Phillip Brennan  
Stephen Mitchell Brown  
Samantha Emily Cassel  
Chiranjiv Jayesh Chevli  
Kalgi Chokshi  
Michael Paul Dodds  
Melissa Renee DuBois  
Brandon Tyler Eng  
Alpaslan Ersoz  
Nathan Tessema Ersumo  
Cara Marie Esposito  
Adam Raymond Ferreira  
Eliza Kathleen Fredette  
Jaclyn Taylor Goulet  
Margaret Louise Gunn  
Yue Hu  
Andrew Abraham Joseph  
Sarah C. Julius  
Michael David Koerner  
Aarathi Krishna  
Xinyi Lu  
Haiyue Lu  
Bryan J. Melilli

Tyler William Miller  
Neil Mittal  
Haritha Naveen  
Durand J. O'Meara  
Neel Patel  
Yasaman Razavi Asfali  
Alicia A. Rusnak  
Deepika Seethamraju  
Ravi Shah  
Sunil Shah  
Derek A. Sheesley  
Michael Gregory Shmukler  
Joseph T. Sincavage  
Angelica Spinelli  
Adam David Still  
Michal Swoboda  
Prakruti Anil Talreja  
Neha Thomas  
Amanda Layne Tilles  
Gabrielle Toner  
Evan L. Tooker  
Cassandra Tu  
Michael Reed Vennel  
Wenyu Xin

# GRADUATING CLASS OF 2017

## Graduate Students PhD in Biomedical Science

Andrew J. Abbate  
Daryl O. Omire-Mayor

Pichai Raman  
Basak Doyran Sitik

## PhD in Biomedical Engineering

Gregory Christopher Antell  
Gabriela Hernandez Meza  
Abraham G. Lin  
Chen Liu  
Jia Nong

Arpit D. Shah  
Valerie J. Tutwiler  
Zhicheng Wang  
Honghui Zhang

## STUDENT ACCOMPLISHMENTS AND HIGHLIGHTS

### **Andy Abbate Wins the Human Factors and Ergonomics Society (HFES) Student Member With Honors Award**

Andy Abbate, PhD candidate in BIOMED (Advisors: A. Throckmorton and E. Bass), won the Human Factors and Ergonomics Society (HFES) Student Member With Honors Award. This designation honors students who have made outstanding contributions to the discipline and/or HFES during their tenure as students. Andy is the first Drexel student ever to win this award.

- ◆ Led the launching of the first Drexel University Student Chapter of the Human Factors and Ergonomics Society (HFES), under the direction of faculty advisor Dr. Michelle Rogers, associate professor of information science in CCI.

### **Walker Alexander Wins the Best Poster Presentation at the Inaugural Drexel Emerging Graduate Scholars Conference**

Walker Alexander, BS/MS candidate in BIOMED (Advisor: L. Lenz), won the Best Poster Presentation Award for the poster titled “Understanding Pan Troglodytes Trafficking with Genetics” at the inaugural Drexel Emerging Graduate Scholars Conference.

### **David Alfego, Nathan Tessema Ersumo, Daryl Omire-Mayo, Reva Street, and Valerie Tutwiler Are 2017 BIOMED Graduate Award Winners**

The following graduate students are 2017 BIOMED Graduate Award Winners:

- ◆ Teaching Assistant Excellence – David Alfego, PhD candidate (Advisor: A. Kriete)
- ◆ Outstanding Promise – Nathan Tessema Ersumo, BS/MS candidate (Advisor: K. Spiller) and Daryl Omire-Mayo, PhD candidate (Advisor: K. Pourzeaei)
- ◆ Outstanding Civic Engagement – Reva Street, PhD candidate (Advisor: C. Schauer)
- ◆ Outstanding Dissertation – Valerie Tutwiler, PhD candidate (Advisor: K. Spiller)

### **Evan Bisirri Receives a 2017 Goldwater Scholarship Honorable Mention for His Research on a Collapsible Impeller Pump for the Fontan Circulation**

Evan Bisirri, BS/MS candidate in BIOMED (Advisor: A. Throckmorton), received a 2017 Goldwater Scholarship Honorable Mention for the fluid-structure interaction research he is conducting with Dr. Amy Throckmorton on a collapsible impeller pump for the Fontan circulation at the Drexel BioCirc Lab.

### **Samantha Cassel, Kelsey Chung, Raymond Dulman, Carson Fox, Kelly Fox, and Maneesha Sahni Will Present Their Implantable Roller Pump Research at the 63rd Annual Conference of the American Society for Artificial Internal Organs (ASAIO)**

Samantha Cassel, BS/MS candidate, and Carson Fox, PhD candidate, both in BIOMED, and Kelly Fox, Maneesha Sahni, Raymond Dulman, Kelsey Chung, all BS students in BIOMED, as well as Randy Stevens, MD (St. Christopher’s Hospital for Children) and Amy Throckmorton, PhD, associate professor in BIOMED, will present their research titled “Novel Implantable Roller Pump to Treat Heart Failure-Induced Lymphedema” at the 63rd Annual Conference of the American Society for Artificial Internal Organs (ASAIO) later this summer.

### **Michael Chen, Desiree Martini, David Rodak, and Kenneth Rodriguez Receive an Honorable Mention in the 2016 NIH-NIBIB Design by Biomedical Undergraduate Teams (DEBUT) Challenge**

Michael Chen, BS student in BIOMED, and Desiree Martini, David Rodak, and Kenneth Rodriguez, all BS/MS candidates in BIOMED (Advisor: Dr. Kara Spiller), received an Honorable Mention in the 2016 Design by Biomedical Undergraduate Teams (DEBUT) Challenge at the 2016 BMES Annual Meeting for their project titled “Tendon Reinforcement for Rotator Cuff Repair.”

### **Daphney Chery Wins the 3rd Place Poster Prize at the 2016 Penn Center for Musculoskeletal Disorders (PCMD) Scientific Symposium**

Daphney Chery, PhD Candidate in BIOMED (Advisor: L. Han), won the 3rd Place Poster Prize at the 2016 Penn Center for Musculoskeletal Disorders (PCMD) Scientific Symposium for her work titled "Direct Investigation of the Roles of Decorin in Cartilage Pericellular Matrix via Immunofluorescence-guided AFM" in the Biomechanics category.

- ◆ Won the Diversity Travel Award for the 2017 Summer Biomechanics, Bioengineering, and Biotransport (SB3C) Conference for her work titled "The Roles of Decorin in the Structure and Mechanics of Cartilage Pericellular Matrix During Skeletal Development."

### **Chiranjiv Chevli and Prakruti Talreja Win 3rd Place in the 2017 Drexel University Libraries and College of Engineering Student PITCH Competition**

Chiranjiv Chevli and Prakruti Talreja, both MS Candidates in BIOMED, won 3rd Place in the Drexel University Libraries and College of Engineering Student PITCH Competition for their startup, Global Health LLC, a medical tourism service provider that partners with leading medical institutions and pioneer surgeons to make overseas medical treatment comfortable, safe and enjoyable. Students from a variety of disciplines shared their ideas for innovative new technologies aimed at positively impacting the global community.

### **Nathan Tessema Ersumo and Valerie Tutwiler Are 2017 Drexel University Graduate College Award Winners**

Nathan Tessema Ersumo, BS/MS candidate, and Valerie Tutwiler, PhD candidate, both in BIOMED (Advisor: K. Spiller), were 2017 Drexel University Graduate College award winners. Nathan received the Graduate College Award for Outstanding Promise for exhibiting great promise for regional, national or societal impact, and accordingly, for enhancing Drexel's reputation, now and in the future, while Valerie received the Graduate College James Herbert Outstanding Leadership Award.

### **Carson Fox Receives a 2017 Koerner Family Award for Graduate Students in Engineering**

Carson Fox, PhD candidate in BIOMED (Advisor: A. Throckmorton), received a 2017 Koerner Family Award for Graduate Students in Engineering for his research titled "New Continuous-Flow Artificial Heart for Use in Smaller Sized Adults and Pediatric Patients."

### **Melissa Frendo-Rosso Receives a 2017 Drexel University Cooperative Education Award for Leading Successful Iterations of a New Product**

Melissa Frendo-Rosso, undergraduate student in BIOMED, with a concentration in biomechanics, received a 2017 Drexel University Cooperative Education Award for her co-op with Drummond Scientific Company, where she was the first Drexel co-op ever hired by Drummond and was given the challenging project of leading several successful iterations of a new product prototype that the company plans to commercialize.

### **Pamela Graney and Claire Witherel Each Receive a Society for Biomaterials Honorable Mention 2017 Student Travel Achievement Recognition (STAR) Award**

Pamela Graney and Claire Witherel, both PhD candidates in BIOMED (Advisor: K. Spiller), each received an Honorable Mention 2017 Student Travel Achievement Recognition (STAR) Award at the Society for Biomaterials Annual Meeting.

### **Prince Jacob, Haritha Naveen, and Saiprasad Sankaranarayanan Advance to the Final Round of the 2017 Tibetan Innovation Challenge**

Saiprasad Sankaranarayanan, Haritha Naveen, and Prince Jacob, all MS Candidates in BIOMED (Advisors: A. Kriete, S. Balasubramanian, and A. Sacan, respectively), advanced to the final round of the 2017 Tibetan Innovation Challenge, an international social entrepreneurship business plan competition aimed at improving the lives of Tibetans living in refugee camps in India through self-sustaining and replicable business ideas.

**Ajo Joseph, Kevin Kunju, Mohana Nagda, Neel Patel, and Sunil Shah Win 1st Place in the BIOMED 2017 Senior Design Showcase Team Poster Competition**

Ajo Joseph, Kevin Kunju, Mohana Nagda, Neel Patel, and Sunil Shah (Advisors: Drs. Peter A. Lewin, Kara Spiller, and Donald McEachron), won 1st Place in the BIOMED 2017 Senior Design Showcase Team Poster Competition for the poster titled “Optimizing a Low Frequency (20 kHz), Low Pressure (55 kPa) Therapeutic Ultrasound Applicator To Treat Human Osteoporotic Long Bone Fractures.”

The 2nd and 3rd Place teams in the Team Poster Competition are listed below:

2nd Place: “Novel Implantable Roller Pump To Treat Heart Failure-Induced Lymphedema”

Team Members: Samantha Cassel, Kelsey Chung, Raymond Dulman, Kelly Fox, and Maneesha Sahni / Advisor: Dr. Amy Throckmorton

3rd Place: “Hypercapnia Inducement System for Assessment of Cerebral Vascular Reactivity in Traumatic Brain Injury Population”

Team Members: Stephen Brown, Thomas Lightfoot-Vidal, Ashley Malone, Yerram Pratusha Reddy, and Joseph Sincavage / Advisor: Dr. Meltem Izzetoglu

**Shawn Joshi, Emily Lurier, and Carli Moorehead Are 2017 Fulbright Honorees**

Three Drexel BIOMED students have been awarded a prestigious Fulbright US Student Program Grant for 2017-18:

- ◆ Shawn Joshi, MD/PhD candidate in BIOMED/DUCoM (Advisor: H. Ayaz), will work on the project titled “Augmenting Neurological Therapy with Objective Imaging,” with Dr. Helen Dawes at Oxford Brookes University of the UK and Dr. Tomas Ward at Maynooth University of Ireland at OxINAHr (Oxford Institute of Nursing and Allied Health Research).
- ◆ Emily Lurier, PhD candidate in BIOMED (Advisor: K. Spiller), will work on the project titled “Designing a Novel Controlled Cytokine Release System To Prevent Bioprosthetic Heart Valve Failure,” with Dr. Carljijn Bouten at the Eindhoven University of Technology (TU/e) in the Netherlands.
- ◆ Carli Moorehead, BS/MS candidate in BIOMED and MSE (Advisor: M. Marcolongo), will work on the project titled, “Developing ‘Smart’ Bone Implant Materials for Improved Regeneration and Repair,” with Dr. Simone Sprio at the Institute of Science and Technology in Ceramics (ISTEC-CNR) in Faneza, Italy.

**Shawn Joshi Receives a National Center for Adaptive Neurotechnologies (NCAN) Award To Attend the 2017 Summer School in Adaptive Neurotechnologies**

Shawn Joshi, MD/PhD student in BIOMED/DUCoM (Advisor: H. Ayaz), received a National Center for Adaptive Neurotechnologies (NCAN) Award to attend an NIH sponsored course in adaptive neurotechnologies.

**Sarah Julius, Bryan Melilli, Emily Qian, Luke Raymond, and Victoria Sadowski Win 1st Place in the 2017 BIOMED Senior Design Competition**

Sarah Julius, Bryan Melilli, Emily Qian, Luke Raymond, and Victoria Sadowski (Advisor: Dr. Ken Barbee), won 1st Place in the 2017 School of Biomedical Engineering, Science and Health Systems (‘BIOMED’) Senior Design Competition for their project titled “Anti-Kink Custom-Curve Endotracheal Tube Stabilizer.” The two runners-up teams in the BIOMED Senior Design Competition are listed below:

- ◆ “Design of Electrospinning System for Control of Nanofiber 3D”  
Team members: Brandon Eng, James Kirwan, Alex Mariner, Ravi Shah Michael Shmukler, and Brendan Sweeney  
Advisor: Dr. Lin Han
- ◆ “Radial Inlet Volute Design for a Pediatric Centrifugal Cardiac Pump”  
Team members: Sherika Gordon, Sarah Haynes, Jennifer Patten, Khyati Prasad, and Ashley Ramirez  
Advisor: Dr. Amy Throckmorton



### **Michael Koerner and Colleagues Are Mentioned in a Technically Philly Story on Their Exo-Skin Glove Presentation at Philly Tech Week's "The Future of Health Sciences" Panel**

Michael Koerner, undergraduate student in BIOMED (Advisors: A. Cohen, G. Dion), Genevieve Dion, director of the Shima Seiki Haute Technology Lab in the ExCITE Center, Andrew Cohen, associate professor in ECE, and colleagues were mentioned in a Technically Philly story about their Exo-Skin Glove presentation at "The Future of Health Sciences" panel as part of Philly Tech Week.

### **Alec Lafontant and Colleagues Publish an Article on Pressure Injury Prediction Using Diffusely Scattered Light in the Journal of Biomedical Optics**

Alec Lafontant, PhD candidate in BIOMED (Advisors: M. Neidrauer and L. Zubkov) and colleagues co-authored the paper titled "Pressure Injury Prediction Using Diffusely Scattered Light" published in the Journal of Biomedical Optics (Co-authors: D. Diaz, M. Neidrauer, M. Weingarten, R.A. DiMaria-Ghalili, E. Scuggs, J. Rece, G. Fried, V. Kuzmin, and L. Zubkov).

### **Qing Li Wins a 2017 Webster Jee Young Investigator Award at the International Chinese Musculoskeletal Research Society–Orthopedic Research Society (ICMRS-ORS) Membership Meeting**

Qing Li, PhD candidate in BIOMED (Advisor: L. Han) won a 2017 Webster Jee Young Investigator Award at the International Chinese Musculoskeletal Research Society–Orthopedic Research Society (ICMRS-ORS) Meeting for her work titled "Absence of Decorin Exacerbates DMM-induced Post-traumatic Osteoarthritis in Mice."

- ◆ Won the 1st Place Poster Prize at the 2016 Penn Center for Musculoskeletal Disorders (PCMD) Scientific Symposium for her work titled "Absence of Decorin Exacerbates DMM-induced Post-traumatic Osteoarthritis in Mice" in the microCT category.

### **Emily Lurier Receives a 2017 Whitaker International Fellowship To Conduct Research in the Netherlands**

Emily Lurier, PhD candidate in BIOMED (Advisor: K. Spiller), received a 2017 Whitaker International Fellowship to conduct research with leading experts in the heart valve tissue engineering field in the Netherlands to optimize and test her drug delivery system.

- ◆ Won the People's Choice for 3MT Award for her 'Three Minute Thesis' titled "How to Mend a Broken Heart (Valve)" at the inaugural Drexel Emerging Graduate Scholars Conference.
- ◆ Chosen with Claire Witherel, PhD candidate in BIOMED (Advisor: K. Spiller), to present research posters at the 2017 Drexel University International Research Showcase. Emily presented the poster titled "Designing a Novel Controlled Cytokine Release System To Prevent Bioprosthetic Heart Damage" and Claire presented the poster titled "Host-Biomaterial Interactions in Zebrafish."

### **Danika Meldrum Wins 1st Place in BIOMED Category at the 2016 STAR Scholars Summer Showcase**

Danika Meldrum, undergraduate student in BIOMED (Advisors: M. Wheatley and B. Oeffinger), won 1st Place amongst 17 STAR (Students Tackling Advanced Research) Scholars in BIOMED for the project titled "Detoxing the Microbubble" at the 2016 STAR Scholars Summer Showcase.

### **Carli Moorehead Receives an NSF Graduate Research Fellowship Program (GRFP) Grant**

Carli Moorehead, BS/MS candidate in BIOMED and MSE (Advisor: M. Marcolongo), received a 3-year \$34K NSF Graduate Research Fellowship Program (GRFP) grant to work on bio-inspired, crack tolerant polymer-ceramic composites for both biomedical and structural applications.

### **Sina Nassiri Is Invited To Present His Wound Healing Research at the 29th Annual Meeting of the Wound Healing Society**

Sina Nassiri, PhD candidate in BIOMED (Advisor: K. Pourrezaei), was invited to present his research titled "Coexpression Network Analysis of Time-Course Transcriptional Response During Cutaneous Wound Healing in a Murine Model of Diabetes" at the 29th Annual Meeting of the Wound Healing Society with the Symposium on Advanced Wound Care (SAWC), as well as two posters titled

“Smoothing Splines Mixed-Effects Modeling of Longitudinal Transcriptional Response During Cutaneous Scarification” and “Functional Gene Set Analysis Predicts Novel Cellular and Molecular Immune Mediators of Impaired Diabetic Wound Healing.”

**James Peters Wins the 1st Place Poster Prize at the Philadelphia Spine Research Society (PSRS) 2016 Spine Research Symposium**

James Peters, PhD candidate in BIOMED (Advisor: S. Balasubramanian), won the 1st Place Prize in the Philadelphia Spine Research Society (PSRS) 2016 Spine Research Symposium poster competition for the poster titled “Normative Morphology and Growth of the Pediatric Lumbar Vertebrae.”

**Corey Quigley Wins the Drexel University 2016 Study Abroad Photo Contest**

Corey Quigley, undergraduate student in BIOMED, was featured in the Summer 2016 edition of Drexel Magazine for having won the Drexel University 2016 Study Abroad photo contest.

**Ravi Shrivastav Receives a Kathryn W. Davis Projects for Peace Award for “Project Rachana: Stitch for Peace”**

Ravi Shrivastav, MS Student in BIOMED, received a 3-month \$10K Kathryn W. Davis Projects for Peace award for the project titled “Project Rachana: Stitch for Peace,” aimed at providing training to underprivileged women and girls in Nepal so they can acquire hands-on skills in tailoring and sewing, thereby helping them become independent, economically productive, and able to foster within community development.

**Valerie Tutwiler Has First-Author Publications Featured as the Cover Image of the Journal Atherosclerosis, Thrombosis and Vascular Biology and Biophysical Journal**

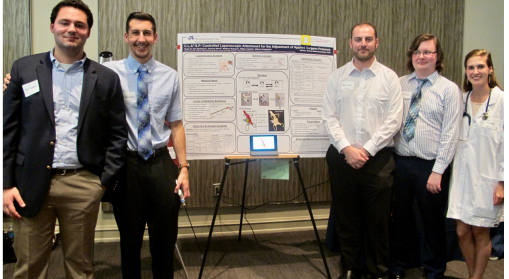
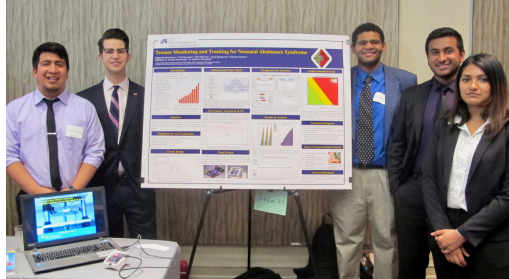
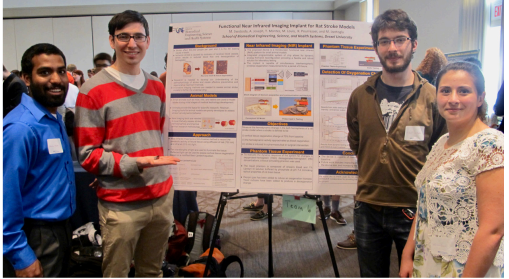
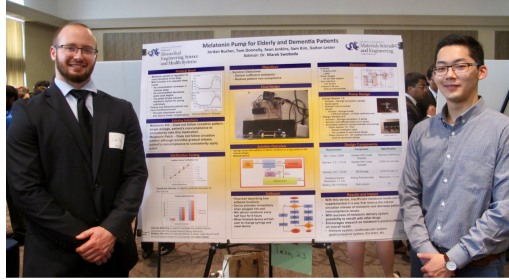
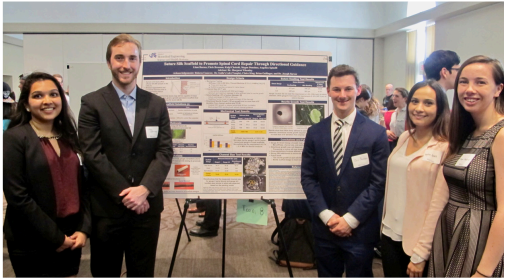
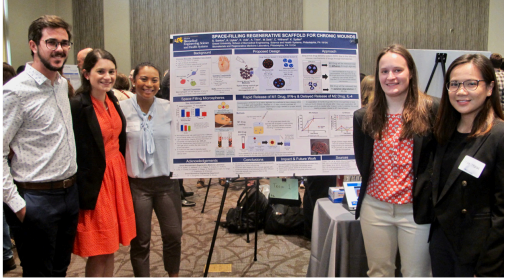
Valerie Tutwiler, PhD candidate in BIOMED (Advisors: K. Spiller and J. Weisel, UPenn), had two first-author publications appear in print, both of which were featured as the cover image of the journal Atherosclerosis, Thrombosis and Vascular Biology, titled “Contraction of Blood Clots Is Impaired in Acute Ischemic Stroke” (Co-authors: A. Peshkova, I. Andrianova, D. Khasanova, J. Weisel, R. Litvinov) and Biophysical Journal, titled “Interplay of Platelet Contractility and Elasticity of Fibrin/Erythrocytes in Blood Clot Retraction” (Co-authors: H. Wang, R. Litvinov, J. Weisel, V. Shenoy). The Biophysical Society blog also featured this research in a piece titled “Mechanical Interplay in Clot Contraction.”

**Jazmean Williams Presents an Undergraduate Research Poster at the American Biomedical Research Conference for Minority Students (ABRCMS)**

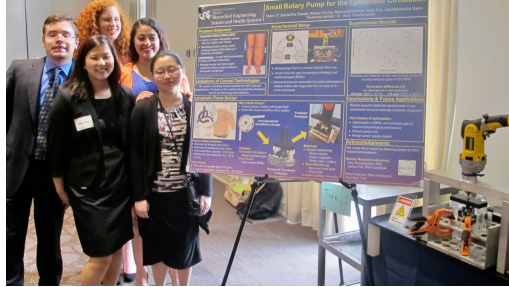
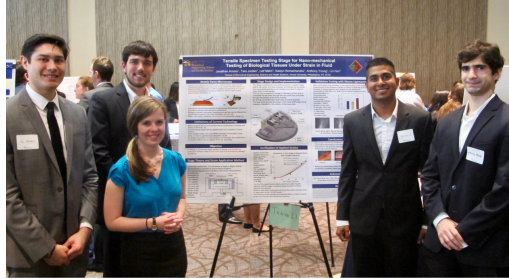
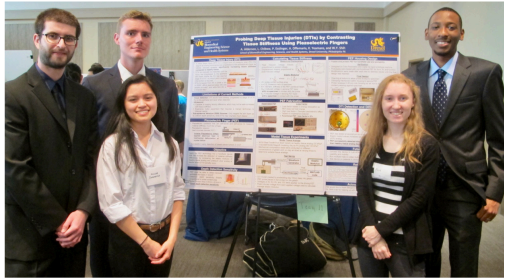
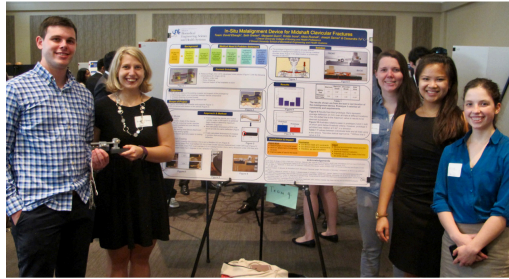
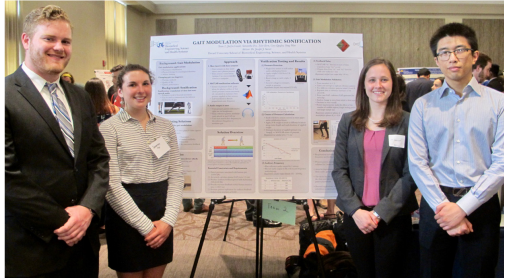
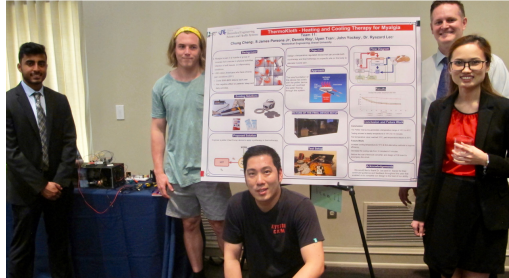
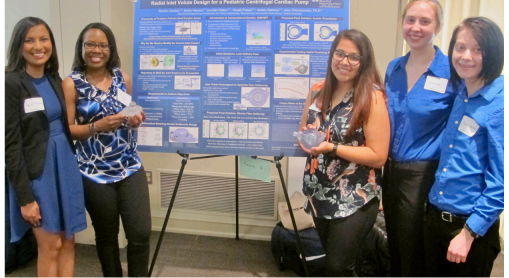
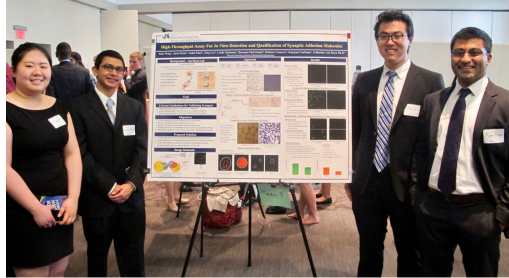
Jazmean Williams, BS and Louis Stokes Alliance for Minority Participation (LSAMP) student in BIOMED (Advisor: S. Balasubramanian), presented the poster titled “Examining Torso Belt Fit and Optimal Positioning of the Upper and Lower Extremities for Human Volunteers for Sled Studies” at the American Biomedical Research Conference for Minority Students (ABRCMS).

**Claire Witherel Receives an NSF Fellowship To Attend the 16th International Summer School on Biocomplexity, Biodesign, and Bioinnovation**

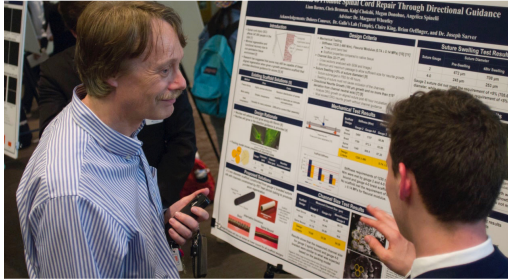
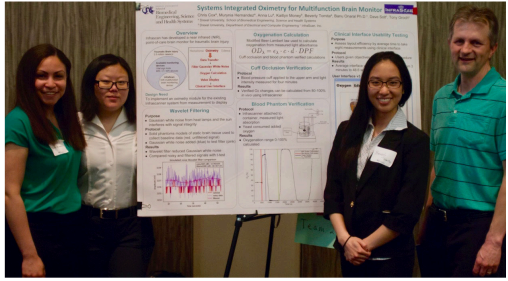
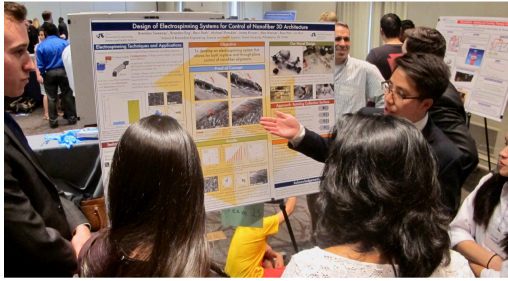
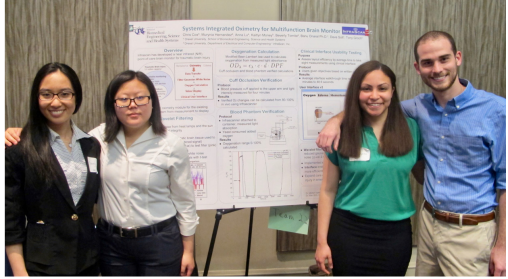
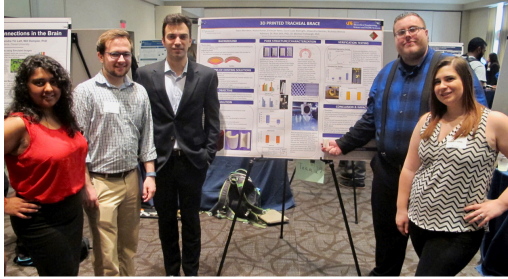
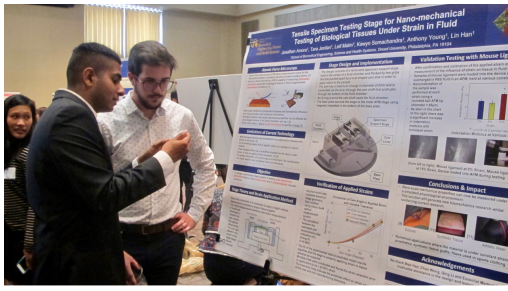
Claire Witherel, PhD candidate in BIOMED (Advisor: K. Spiller), received an NSF Fellowship to attend the 16th International Summer School on Biocomplexity, Biodesign, and Bioinnovation: from Gene to System in Chania, Greece.



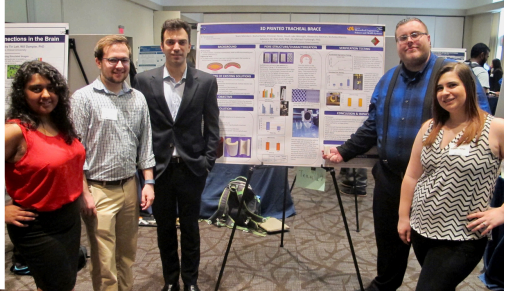
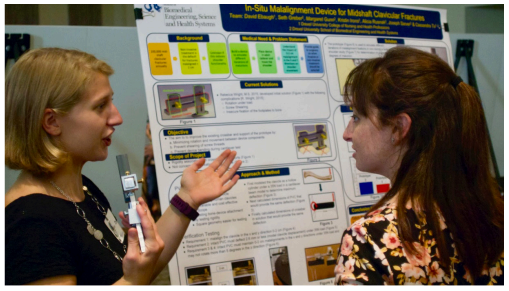
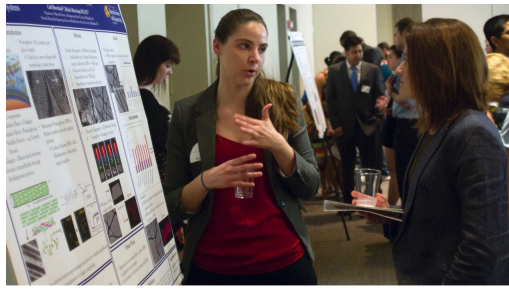














## FACULTY AND STAFF ACCOMPLISHMENTS AND HIGHLIGHTS

### **BIOMED Faculty Are Honored for Outstanding Faculty Achievement at the 2017 Faculty Recognition Awards Ceremony**

The following BIOMED faculty members were honored for outstanding faculty achievement at the 2017 Faculty Recognition Awards Ceremony:

- ◆ Catherine von Reyn, PhD, assistant professor – Career Development Award
- ◆ Kara Spiller, PhD, assistant professor – Early Career Scholarly Achievement Award
- ◆ Rahamim Seliktar, PhD, professor – Faculty Granted Emeritus Status

### **BIOMED Faculty Receive 2016 Drexel University Clinical and Translational Research Institute (CTRI) Seed Funding Awards**

The latest round of seed funding from Drexel's Clinical and Translational Research Institute (CTRI) resulted in a total of 11 new awards, of which 5 include BIOMED faculty members:

- ◆ Project: "Exosome Mediated Gene Regulation in Complex Regional Pain Syndrome"
  - ◇ Seena Ajit, PhD (PI – Pharmacology & Physiology, CoM)
  - ◇ Ricardo Cruciani, MD, PhD (Neurology, CoM)
  - ◇ Ahmet Sacan, PhD (BIOMED)
- ◆ Project: "Brain Based Biomarker To Differentiate Adolescent Suicide Attempters From Non-Attempters"
  - ◇ Guy Diamond, PhD (PI – CNHP)
  - ◇ Hasan Ayaz, PhD (BIOMED)
- ◆ Project: "The Effect of rTMS Stimulation of Default Mode Network Regions on Working Memory and fNIRS Determined Cortical Oxygenation Changes in the Dorsolateral Prefrontal Cortex"
  - ◇ Gediminas Peter Gliebus, MD (PI – Neurology, CoM)
  - ◇ Carol Lippa, MD (Neurology, CoM)
  - ◇ Ricardo Cruciani, MD, PhD (Neurology, CoM)
  - ◇ Hasan Ayaz, PhD (BIOMED)
- ◆ Project: "Developing Machine-Learning Algorithms To Detect Affect Lability Using Wearable Sensors"
  - ◇ Adrienne Juarascio, PhD (PI – Psychology)
  - ◇ Evan Forman, PhD (Psychology)
  - ◇ Zoe Zhang, PhD (Psychology)
  - ◇ Timothy Kurzweg, PhD (CoE)
  - ◇ Marek Swoboda, PhD (BIOMED)
- ◆ Project: "Early Detection of Deep Tissue Injury in Critically Ill Surgical Patients"
  - ◇ Michael Weingarten, MD (PI – Surgery, CoM)
  - ◇ Brendan McCracken, MD (Surgery, CoM)
  - ◇ Rose Ann DiMaria-Ghalili, PhD, RN (CNHP)
  - ◇ Leonid Zubkov, PhD (BIOMED)
  - ◇ Michael Neidrauer, PhD (BIOMED)

### **Drs. Hasan Ayaz, Kurtulus Izzetoglu, and Banu Onaral Receive an Air Force Research Lab and Lockheed Martin Corporation Grant to Develop a Cognitive Assessment Model for Performance and Task Management**

Drs. Hasan Ayaz, associate research professor (PI), Banu Onaral, H.H. Sun Professor (Co-PI), and Kurtulus Izzetoglu, associate research professor (Co-PI), all in BIOMED, received a 2-year \$395K Lockheed Martin Corporation Advanced Technology Laboratories grant for the project titled "Cognitive Assessment Model for Performance and Task Management."

### **Dr. Hasan Ayaz Co-Chairs the Inaugural International Neuroergonomics Conference**

Dr. Hasan Ayaz, associate research professor, together with Frederic Dehaes of ISAE, chaired the inaugural Neuroergonomics Conference in Paris France, held Oct 6-7, 2016. The conference brought together industry and university scientists, scholars, engineers, faculty, and students

studying Neuroergonomics, which is the emerging field of the study of the human brain at work doing natural tasks in everyday settings. Drs. Ayaz and Dehais are also editing a book to be published by Elsevier on Neuroergonomics.

- ◆ Received a 1-year \$100K Lockheed Martin Corporation Advanced Technology Laboratories grant for the project titled “Neuroimaging-based Augmentation Testbed.”
- ◆ Featured in a story on Slate titled “Pay Attention!,” discussing the use of functional near-infrared spectroscopy (fNIRS) as a possible modern solution to the ancient problem of classroom boredom and trying to keep inattentive students engaged during class.
- ◆ Leading with colleagues from Princeton University a new study published in a Scientific Reports article titled “Measuring Speaker–Listener Neural Coupling with Functional Near-Infrared Spectroscopy” (Co-authors: Y. Liu, E. Piazza, E. Simony, P. Shewokis, B. Onaral, U. Hasson, and H. Ayaz). Dr. Ayaz was also quoted in several related news pieces on the subject in WIRED UK, Science Alert, Photonics Media, Inverse, Huffington Post, Philly Voice, I4U News and PsychCentral, and DrexelNow.
- ◆ Gave an invited plenary talk titled “New Generation of Wearable and Ambulatory Neuroimaging: Principles and Emerging Neuroergonomic Applications” at the 5th International Conference on Neuroeconomics and Neuromanagement in Hangzhou, China.
- ◆ Gave an invited half-day training session on optical brain imaging and signal processing at the 4th International Functional Near Infrared Spectroscopy Conference at the University of Paris, Descartes.
- ◆ On the program committee of the 8th International IEEE-EMBS Neural Engineering Conference in Shanghai, China; on the program committee of the inaugural Neuro-Adaptive Technology (NAT) Conference in Berlin, Germany; on the organizing committee of the Workshop on Methodologies for Cognitive Research on Aviation (MeCoReA) in Granada, Spain; and on the scientific committee of the 3rd International Mobile Body Brain Imaging (MoBI) Conference in Berlin, Germany.

**Dr. Sriram Balasubramanian Is Interviewed on the Daily Planet Show About How Pre-car Crash Avoidance Moves Affect the Human Body**

Dr. Sriram Balasubramanian, associate professor in BIOMED, was interviewed on an episode of the Discovery Channel Canada’s Daily Planet show that featured a sled developed by Drexel biomedical engineers used to test how pre-car crash avoidance maneuvers affect the human body.

**Dr. Lin Han Receives a \$350K NSF Grant for His Work on the Role of Small Proteoglycans in Cartilage Mechanical Properties**

Dr. Lin Han, assistant professor in BIOMED, received a 3-year \$350K NSF grant to support his project titled “Role of Small Proteoglycans in the Structure and Biomechanics of Articular Cartilage” in the program of Biomechanics and Mechanobiology.

**Dr. Uri Hershberg, Justin Melunis, and Colleagues Publish an Article in the Journal Nature on Using Spectral Imaging and Analysis To Reveal the Organelle Interactome**

Dr. Uri Hershberg, associate professor in BIOMED, Justin Melunis, PhD candidate in BIOMED (Advisor: U. Hershberg), and colleagues published the article titled “Applying Systems-level Spectral Imaging and Analysis To Reveal the Organelle Interactome” in the journal Nature (Co-authors: A. Valm, S. Cohen, W. Legant, E. Wait, A. Cohen, M. Davidson, E. Betzig, and J. Lippincott-Schwartz).

**Dr. Kurtulus Izzetoglu Co-chairs Air Transportation Conference Hosted by Drexel University**

Dr. Kurtulus Izzetoglu, associate research professor in BIOMED, was the local conference chair for the 7th International Conference on Research in Air Transportation (ICRAT), held at Drexel University. FAA and the European Organization for the Safety of Air Navigation (Eurocontrol) jointly sponsor the annual conference.

- ◆ Featured in a DrexelNow article titled “Drexel Is Helping the FAA Modernize Technical Training” that discusses how the FAA Center of Excellence (COE) is leveraging Dr. Izzetoglu and his team’s expertise in wearable functional near-infrared spectroscopy (fNIRS) units to measure brain activity in field settings.

## Faculty and Staff Accomplishments and Highlights

- ◆ Presented with Dr. Hasan Ayaz, associate research professor in BIOMED, a webinar titled “Combining Optical Brain Imaging and Physiological Signals” that was hosted by BIOPAC and discussed the fundamentals of functional near infrared (fNIR) imaging to measure neural activity and hemodynamic response in the prefrontal cortex for cognitive function assessment.

### **Dr. Meltem Izzetoglu Is Cited in a KFDX-TV News Segment on the Use of Functional Near-Infrared Spectroscopy (fNIRS) To Study Symptoms of Parkinson’s Disease**

Dr. Meltem Izzetoglu, associate research professor in BIOMED, was cited in a KFDX-TV (NBC-Wichita Falls, Texas) news segment on researchers at Albert Einstein College of Medicine using functional near-infrared spectroscopy (fNIRS) to study symptoms of Parkinson’s disease. Researchers in the School of Biomedical Engineering, Science and Health Systems developed the fNIRS system.

### **Dr. Steven Kurtz and Colleagues Receive an \$855K NIH Grant for Research on Preventing Spinal Infection Using Ultrasound Triggered Prophylaxis**

Drs. Steven Kurtz, associate research professor in BIOMED and director of the Implant Research Center (IRC), Noreen Hickok (PI – TJU), and colleagues received a 5-year \$855K NIH-National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS) R01 grant for the project titled “Preventing Spinal Infection: Ultrasound Triggered Prophylaxis.” Their goal is to use innovative applications of proven materials to further lower spinal implant infection rates and ameliorate the pain and suffering associated with infections arising after spinal surgery.

- ◆ Convened with the Implant Research Center and Exponent, Inc. the 3rd International PEEK (Polyetheretherketone) meeting.
- ◆ Featured with the Implant Research Center (IRC) in a Philadelphia Inquirer story on the research and analysis of failed medical implants at the IRC. Genymphas Higgs, PhD candidate, and Eliza Fredette, BS/MS candidate, both in BIOMED, were also mentioned in the story.
- ◆ Featured with the IRC in a Drexel News Blog story titled “Inside Drexel’s Morgue for Failed Joint Implants” on how the IRC analyzes and stores over 6,500 implants, including complete total hip replacement systems — expertly crafted devices that nonetheless sometimes fail inside a human body.

### **Laurie Lenz Gives a Presentation on the Benefits of Creating a Student Advisory Board at the Annual National Academic Advising Association (NACADA) Conference**

Laurie Lenz, Academic Advisor in BIOMED, gave a presentation titled “Student Feedback Matters: The Benefits of Creating a Student Advisory Board” at the 2017 National Academic Advising Association (NACADA) conference.

### **Dr. Peter A. Lewin and Colleagues Receive a \$3M NIH Grant for Their Enhanced Ultrasound Treatment of Chronic Wounds Project**

Drs. Peter A. Lewin, Richard B. Beard Distinguished University Professor and Director, Biomedical Ultrasound Research and Education Center (PI); Leonid Zubkov, research professor; and Michael Neidrauer, assistant research professor (all in BIOMED); and Drs. Michael Weingarten (CoM), Rose Ann DiMaria-Ghalili (CNHP), Juan Muniz (CNHP), and David Margolis (UPenn) received a 5-year \$3M NIH R01 grant for the project titled “Enhanced Ultrasound Treatment of Chronic Wounds with Monitoring of Healing and Quality of Life Outcomes” to develop a novel and unique combination of a lightweight, battery-powered low frequency ultrasound applicator for chronic wound therapy with noninvasive optical wound diagnostics, and detailed analysis of the nutritional and inflammatory status of patients who respond to the treatment.

- ◆ Presented with Leonid Zubkov, research professor, and Michael Neidrauer, assistant research professor (both in BIOMED); and Drs. Michael Weingarten (CoM), Rose Ann DiMaria-Ghalili (CNHP), Juan Muniz (CNHP), and David Margolis (UPenn) their NIH sponsored research titled “Enhanced Ultrasound Treatment of Chronic Wounds with Monitoring of Healing and Quality of Life Outcomes” to Congressmen and Senators at the Medical Imaging Technology Showcase on Capitol Hill.

- ◆ Featured with Dr. Michael Weingarten (CoM) in a Drexel Magazine piece titled ‘The Story of No. 14/241,709’ about their patent pending ultrasound device for treating chronic wounds and how it came to be.
- ◆ Featured on WTXF-TV (FOX-29), PhillyVoice.com, MDT.com, and DrexelNow with the portable ultrasound wound healing device developed with Drs. Leonid Zubkov, Michael Neidrauer (both in BIOMED), Michael Weingarten (CoM), Rose Ann DiMaria-Ghalili (CNHP), Juan Muniz (CNHP), and David Margolis (UPenn) to speed the process of healing chronic wounds.
- ◆ Appointed as an Expert Consultant to the Food and Drug Administration (FDA) Center for Devices and Radiological Health (CDRH). Dr. Lewin’s appointment reflects global recognition of his multidisciplinary contributions to the field of biomedical devices and enhances the visibility of the School and Drexel University.
- ◆ Co-authored with colleagues from Shanghai Jiao Tong University (SJTU) an article titled “Low-intensity (400 mW/cm<sup>2</sup>, 500 kHz) Pulsed Transcranial Ultrasound Preconditioning May Mitigate Focal Cerebral Ischemia in Rats” that was published in the journal Brain Stimulation.

**Dr. Donald McEachron Receives a Drexel University Urban Health Collaborative Grant To Study Circadian Lighting for Improved Health and Wellbeing for Older Adults**

Dr. Donald McEachron, teaching professor and coordinator for academic assessment and quality improvement in BIOMED, received a \$25K Drexel University Urban Health Collaborative pilot award for the project titled “Circadian Lighting for Improved Health and Wellbeing for the Older Adults at Casa Farnese.”

- ◆ Designated as an Assessment Fellow for Drexel University. Fellows act as mentors to faculty members needing assistance in any aspect of the assessment cycle and exponentially assist in the spread of the continuous improvement model within courses and programs.
- ◆ Interviewed for a KYW-Newsradio (1060-AM) story on how daylight saving time can negatively affect one’s health.

**Dr. Banu Onaral and Colleagues Receive a VentureWell Grant To Support Their Clinical Immersion to Product Innovation Course**

Dr. Banu Onaral, H. H. Sun Professor in BIOMED, and colleagues in the Westphal College of Media Arts and Design and Close School of Entrepreneurship, received a \$19.6K VentureWell grant to support their proposed course titled “Clinical Immersion to Product Innovation” to provide students with a better understanding of how to identify clinical problems, offer exposure to real-world design learning and experience with Lean Startup methodology, as well as increased entrepreneurial confidence.

- ◆ Co-authored with Hasan Ayaz, associate research professor, and Jesse Mark, PhD student, both in BIOMED, a post on ConstantTherapy.com about their research on how constant therapy exercises affect the brain. The post cited the authors’ book chapter titled “Evaluating Neural Correlates of Constant Therapy Neurorehabilitation Task Battery: An fNIRS Pilot Study” in “Foundations of Augmented Cognition: Neuroergonomics and Operational Neuroscience” (editors: D.D. Schmorrow and C.M. Fidopiastis).

**Dr. Wan Shih Is Featured in an Exel Magazine Article on Using Nanocrystals To Create a Luminescent Dye That Lets Surgeons Quickly Verify the Presence of Cancer Cells**

Dr. Wan Shih, professor in BIOMED, and Wei Shi, professor in MSE, were featured in a Drexel Exel magazine article titled “Improving the Picture” that discusses their research on how using the same nanocrystals used to produce sharp images in liquid crystal display (LCD) televisions can be engineered to glow red when bonded to cancer cells, thereby giving surgeons a rapid way to verify that they have removed all of a tumor.

**Dr. Kara Spiller Receives a \$110K NIH Grant Diversity Supplement for Her Understanding and Controlling Macrophage Behavior in Angiogenesis Project**

Dr. Kara Spiller, assistant professor in BIOMED, received a 2-year \$110K NIH Grant Diversity Supplement to support one graduate student for her R01 grant for the project titled “Understanding and Controlling Macrophage Behavior in Angiogenesis.”

## Faculty and Staff Accomplishments and Highlights

- ◆ Gave the keynote presentation at Drexel University's inaugural Emerging Graduate Scholars Conference, with the talk "Yes, and: Seizing Opportunities to Build Bridges." Valerie Tutwiler, PhD candidate in BIOMED (Advisor K. Spiller), helped organize the conference.
- ◆ Featured in a 2016 Exel magazine article titled "Body, Heal Thyself" that discusses her investigation on how to use the body's own immune cells to grow blood vessels necessary to wound healing. Her research involves studying ways to naturally spawn blood vessels to feed new tissue growth by taking advantage of the body's response to injury and disease. Dr. Spiller was awarded a 5-year \$1.9M NIH grant to study the cells.
- ◆ Featured in a DrexelNow article titled "Researchers Reveal How an Inflammatory Response to Ceramic Scaffolds Promotes Bone Regeneration" that discusses how, in her and her colleagues' mission to design new biomaterials that promote tissue regeneration, they have identified how inflammation, when precisely controlled, is crucial to bone repair.
- ◆ Appeared in a Drexel News Blog story titled "Deleting This Fatty Acid Receptor Helps Mice Recover From Spinal Cord Injury" that discusses a recent study published in the Journal of Neuroscience on how Dr. Spiller and colleagues at the University of Miami Miller School of Medicine found that the genetic deletion of a fatty acid receptor, CD36, improved motor function in mice, thereby identifying a completely new way to potentially treat spinal cord injury.
- ◆ Quoted in a Laboratory News story about her research on using scaffolds and macrophages to aid cellular healing. Also quoted in an Orthopedics This Week story about her study investigating the relationship between inflammation and bone regeneration.

### **Dr. Amy Throckmorton and Colleagues Receive a 2016 Hartwell Individual Biomedical Research Award**

Dr. Amy Throckmorton, associate professor and director of the BioCirc Research Laboratory in BIOMED, and colleagues received a 3-year \$300K 2016 Hartwell Individual Biomedical Research Award for the project titled "Hybrid Dual-Support Ventricular Assist Device for Heart Failure" to develop a small, versatile dual-pump mechanical device that functions in multiple configurations to support the growth of a patient from infancy to adolescence.

- ◆ Successfully submitted with Carson Fox, PhD Candidate in BIOMED, colleagues, and the Drexel University Office of Technology Commercialization one US provisional patent application (Suture Storage, Dispensing, and Disposal Device, No. 62/449,616) and two full US patent applications (Dual-Pump Continuous-Flow Total Artificial Heart, No. 62/127,316; Impellers, Blood Pumps, and Methods of Treating a Subject, No. 62/136,382).
- ◆ Collaborating with Steven Chopski, postdoctoral fellow in BIOMED, and Dr. Margaret O'Neil in CNHP on an NIH R21 grant titled "Machine Learning Algorithms To Measure Physical Activity in Children with Cerebral Palsy" that is funded by the Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD).

### **Drs. Yinghui Zhong and Colleague Receive a 2017 CURE Grant for Their Work on Novel Materials for Localized Delivery of Neuroprotective Drugs**

Dr. Yinghui Zhong, associate professor in BIOMED (PI), and Veronica Tom, PhD in CoM (Co-PI) received a 2017 Commonwealth Universal Research Enhancement (CURE) grant for their project titled "Local Delivery of Minocycline and Glypican To Promote Protection and Repair After Spinal Cord Injury."

### **BIOMED Hosts Drexel University's 4th Annual Biomedical Engineering Week**

The School of Biomedical Engineering, Science and Health Systems hosted Drexel University's 4th Annual Biomedical Engineering (BME) Week, held throughout the University's main campus. The week featured the BIOMED Senior Design Showcase Team Poster Competition, amongst other events, including an interview workshop, an alumni connection happy hour, and finally, a BIOMED faculty and student version of the popular TV game show 'Family Feud.'

## ALUMNI ACCOMPLISHMENTS AND HIGHLIGHTS

### **Dr. Allison M. Andrews Receives an NIH Ruth L. Kirschstein National Research Service Award (NRSA)**

Allison M. Andrews, alumnus in BIOMED (PhD '12), received an NIH Ruth L. Kirschstein National Research Service Award (NRSA) from the National Institute of Drug Abuse (NIDA) to support her postdoctoral fellow training at the Temple University Lewis Katz School of Medicine.

### **Dr. David Diaz is Among Drexel's First Class of Coulter Fellows**

Dr. David Diaz, alumnus in BIOMED (PhD '16), is among the first class to graduate from Drexel University's Coulter Fellows Program. Dr. Diaz received a 5-month fellowship in which he chose a preferred project to work on and researched what sector the product should enter.

### **Nicole Ferraro Receives an NSF Graduate Research Fellowship Program (GRFP) Grant**

Nicole Ferraro, alumnus in BIOMED (BS/MS '16 – Advisor: K. Spiller), received a 3-year \$34K NSF Graduate Research Fellowship Program (GRFP) grant for the project titled "Multiomics Approach to the Identification and Characterization of Outlier Genes." Nicole is currently in her first year at Stanford University School of Medicine doing rotations in various labs.

### **Claudia Gutierrez Is Selected as a 2017 Fulbright Scholarship Honoree**

Claudia Gutierrez, alumnus in BIOMED (BS/MS '15), was awarded a prestigious Fulbright US Student Program Grant for 2017-18 and is currently pursuing an MD degree at the Mayo Clinic School of Medicine. She will interrupt her studies for one year to conduct research in bone tissue engineering in Dr. Ivan Martin's Tissue Engineering Lab at the University Hospital of Basel, Switzerland.

- ◆ Received an NSF Fellowship to attend the 15th International Summer School on Biocomplexity, Biodesign and Bioinnovation: from Gene to System, in Izmir, Turkey.

### **Dr. Josa Hanzlik Receives an NSF/ASEE Small Business Postdoctoral Research Diversity Fellowship**

Josa Hanzlik, alumnus in BIOMED (BS '13 and PhD '15), received an NSF/American Society of Engineering Education Small Business Postdoctoral Research Diversity Fellowship. She works at ZSX Medical, a startup company at the new Plexus Healthcare Innovation Hub in Philadelphia.

### **Nicholas Pashos Is Named to the 2017 Drexel '40 Under 40'**

Nicholas Pashos, alumnus in BIOMED (BS '11), was named to the 2017 Drexel '40 under 40' and was featured in Drexel Magazine, recognizing him as an outstanding young alumni who is making a mark in his profession and community. Nick is Founder and CEO of BioAesthetics, a Tulane University spinout with the mission to improve reconstruction options for breast cancer patients after they undergo mastectomies.

### **Dhairya Pujara Is Invited To Present at the Group of 77 (G-77) Nations Summit**

Dhairya Pujara, alumnus in BIOMED (MS '12) and Founder and CEO of Ycenter, was invited to present at the Group of 77 (G-77) Nations Summit in Nairobi, Kenya, where he will discuss his work and vision of working with young college students all over the world, and specifically in Africa.

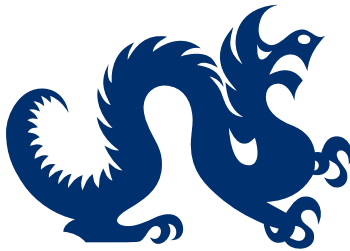


## Peer Mentors and Outreach Volunteers

The School of Biomedical Engineering, Science and Health Systems would like to thank the following students for their valuable contributions in participating as peer mentors and outreach volunteers:

### **Undergraduate Peer Mentors and Outreach Volunteers**

Hazara Begum  
Samantha Cassel  
Kenny Chen  
Eliza Fredette  
Lananh Ho  
Nidhi Kumar  
Ife Miller  
Cari Moorehead  
Nora Murad  
John Quinlan  
Arpit Shah  
Virginia Tanner  
Purva Vaidya  
Bairavi Venkatesh  
Beverly Zhuge



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[instagram.com/drexelbiomed](https://www.instagram.com/drexelbiomed) | [snapchat.com/add/drexelbiomed](https://www.snapchat.com/add/drexelbiomed)