DREXEL BIOMED



School of Biomedical Engineering, Science & Health Systems

Commencement Celebration Reception

June 11, 2010



COMMENCEMENT CELEBRATION RECEPTION

Friday, June 11, 2010 – 12noon

University Club, Sixth Floor - MacAlister Hall

(MacAlister Hall is located on the southeast corner of 33rd & Chestnut Streets)

Welcome and Greeting - Dr. Banu Onaral, Director

Presentation of Graduating Students - Dr. Fred Allen

Remarks by Graduating Students

- Student Speaker on behalf of All Graduates Dr. Robert Hart
- Student Speakers on behalf of weServe Alexa Karkenny and Zain Mahmood

Student Awards and Honors

Faculty and Staff Awards and Honors

The **weServe** Program is premised on the concept that we serve humanity by bringing life saving and life enhancing solutions to people. Participants in the **weServe** program not only serve but also identify unmet needs and issues in urban or global health and proactively bring solutions.



GRADUATING CLASS OF 2010

Undergraduate Students

BS in Biomedical Engineering

Katlin M. Adlon Komal Ahuja Ashot Avakyan

Dale Spencer Babcock Rachel L. Bartels Omkar Rajendra Baxi

Francis X. Bell

Lawrence Matthew Benedict

Stephan Briggs Brandon T. Brino Jeffrey J. Brown Ryan Barclay Caldwell Xu Mingming Chen

Casondra Renae Clawson Amanda R. Comeau Latresa Venette Copes Erik Brandon Crawford Marianne S. Cristobal Sarah C. DeLeon Rohan Naimish Desai Sean Michael Devlin

Christopher Corbin Drescher

Kevin J. Freedman (Magna Cum Laude)

Juff George

Christopher Michael Grace

Matthew J. Gunn Shannon L. Haley

Elizabeth A. Dreher

Song Han

Enos Nathanael Heaps

Jun Hyuk Heo Andrew J. Horvat Aykan A. Karabudak Alexa Jaclyn Karkenny Priyanka P. Kasbekar

Raviyot Singh Khuman Na La Kim

Pradeep K. Kondaveeti Patricia Kontoudis

Cong Bai Li

Allison Lindsey Lloyd Brian Robert Magerr Zain A. Mahmood Ngoc H. Mai

Brenay Lorraine Major

Justin G. Mathew **Emily Ann Mathews**

Lawrence James McCanney II

Ian Mcdonald

Michael Douglas McHugh

Misha Mehta

Ankita Narayan

Andrew Kenneth Moriarity

Philip Jacob Nelson George R. Neusch Atisha Patel Vinay D. Patel Nithin B. Paul Zachary Peksa Phitha Philip

Timothy John Purwin

Silpa Reddy Karl Vernon Reisig Veronica S. Rosa Dheerai Rov Samantha Rusk Carlos Alberto Sanchez

Brian Louis Saunders Shira Segal Abhishek Sengupta

Tushar Sethi

Priyanka Preyas Shah (Summa Cum Laude)

Nidhi Sheth (Cum Laude)

Steven Smith Patrick Staudt Aneta Strus

Wyatt Covington Strutz

Sagib Sultan

Krista Marie Szymborski

Nithva Thambi Shankar K. Thampi Edwin G. Theosmy Kimberly Ann Trasatti Benjamin T. Tweddale

Radhika Upadrasta (Magna Cum Laude)

Megha S. Vadher Jees Varghese Devika M. Varma Thomas F. Ward

Igor Zabrodin (Summa Cum Laude)

GRADUATING CLASS OF 2010

Graduate Students

MS in Biomedical Science

Anita Desikan Michael A. Lanewala Michael Barnes Lee

MS in Biomedical Engineering

Katlin M. Adlon Komal Ahuja Agastya Anishetty

Piyush Arora Rachel L. Bartels Omkar Rajendra Baxi Ryan M. Baxter Francis X. Bell

Monali Bhupendra Bhansali

Amit Bhole

Xu Mingming Chen Amanda R. Comeau Erik Brandon Crawford Sean Michael Devlin

Ravi Sankar Doddasomayajula

Jimit Doshi

Andrew Carter Erwin Kevin J. Freedman Nandita Ganesh Juff George

Soumya Gopinathan Shruti Gour

Dina Harilal Sidhartha Jain

Sankhesh Jayesh Jhaveri Brandon Mark Johnson Steven F. Kemeny

Ravjyot Singh Khuman Pradeep K. Kondaveeti

Shankar N. Gopalakrishnan Mahalinga Iyer

Zain A. Mahmood

Ngoc H. Mai

Greeshma Manomohan

Justin G. Mathew

Michael Douglas McHugh

Misha Mehta

Prasanna V. R. Modayur Chandramouleeswaran

Rashmi Murthy

Dimitrios Papaioannou

Nithin B. Paul

Phitha Philip Nina Premnath

Roshni Ravindranathan Karl Vernon Reisig Dheeraj Roy Samantha Rusk Brian Louis Saunders

Shira Segal

Priyanka Preyas Shah Atman Hemant Shah

Mitul Ajit Shah Nidhi Sheth Minyoung Shin

Wyatt Covington Strutz Krista Marie Szymborski

Nithya Thambi

Igor Zabrodin

Jincy Catherine Thimothy
Uday Kiran Thummalapalli
Kimberly Ann Trasatti
Anup Vijay Umranikar
Devika M. Varma
Robert J. Wimmer, Jr.

GRADUATING CLASS OF 2010

Graduate Students

PhD in Biomedical Science

Kyewon Park

PhD in Biomedical Engineering

Noor B. Dawany Johann Francis deSa Jaimie Beth Dougherty John Robert Eisenbrey III Ertan Ergezen Khaldoun Chaouki Hamade Robert Weisbein Hart Vishal Gopalkrishna Kamat Oluseeni Aramide Komolafe Yichuan Liu Anna Caterina Merzagora Mahdi Sarmady Alessandro Scaglione Kara Lorraine Spiller Hongmiao Zhang He Zhao

STUDENT AWARDS AND HONORS

Xu Mingming Chen, Elizabeth Dreher, Aykan Karabudak, Krista Szymborski, and Kim Trasatti Win First Place Prize in the 2010 BIOMED Senior Design Competition

Xu Mingming Chen, Elizabeth Dreher, Aykan Karabudak, Krista Szymborski, and Kim Trasatti, all undergraduate students in BIOMED (Advisors: Michele Marcolongo and Sumona Sarkar), won the First Place Prize in the 2010 School of Biomedical Engineering, Science, and Health Systems Senior Design Competition for their project titled "A Hybrid Design for A Biomimetic Bottle-Brush Aggrecan Molecule Utilizing a Synthetic Polymer Backbone and Bio-Based Bristle Attachments." The team was also selected to represent the School at the College of Engineering (CoE) Senior Design Competition, held June 2, 2010 in the Mitchell Auditorium of the Bossone Research Enterprise Center. The two Runner-Up teams are listed below and will be honored at the 2010 BIOMED Commencement and Honors Celebration on June 11, 2010 in the University Club in MacAlister Hall.

Runner-Up Team 1: "Apparatus for the Development of Hydrogel Scaffolds Through Controlled Cooling Rates"

Members: Komal Ahuja, Atisha Patel, Brian Saunders, and Wyatt Strutz

Advisors: Peter Lelkes, Ph.D., and Anat Katsir, Ph.D.

Runner-Up Team 2: "Designing a Control-Moment Gyroscope to Introduce Perturbations to an Existing Trunk Control Testing Apparatus"

Members: Omkar Baxi, Cong Bai Li, Ian McDonald, and Silpa Reddy

Advisors: Marco Cannella, Ph.D., and Sheri Silfies, Ph.D.

Adam Greenspan and Teammates Win the Second Place Prize in the 2010 Baiada Business Plan Competition

Adam Greenspan, graduate student in BIOMED (Advisor: K. Pourrezaei) and teammates William Jocson, Sarena Syma, and Manish Maheshwari from the Wharton School, won the Second Place Prize of \$2,000 in The Laurence A. Baiada Center for Entrepreneurship 2010 Business Plan Competition for their project "First Stage Diagnostics."

Alexa Karkenny and Zain Mahmood Present weServe Africa at School of Public Health Alexa Karkenny, BS/MD student in BIOMED, and Zain Mahmood, BS/MS student in BIOMED, gave a presentation on weServe Africa at Drexel's School of Public Health on Monday, April 12, 2010, where they also discussed the prospects of a chapter in Chad. The weServe Program is premised on the concept that we serve humanity by bringing life saving and life enhancing solutions to people. Participants in the weServe program not only serve but also identify unmet needs and issues in urban or global health and proactively bring solutions.

Chirag Patel Dedicates His Co-op towards Health Development and Service in Gambia as Part of Drexel's weServe Africa Program

Chirag Patel, undergraduate student in BIOMED, traveled to Bwiam, Gambia, to dedicate his single co-op towards health development and service as part of Drexel's weServe Africa program. Chirag's work in the Sulayaman Junkung General Hospital (SJGH) provided

assistance to the hospital's biomedical engineering department. His responsibilities there included supervising and training staff on medical equipment, as well as facilitating, installing, restoring and maintaining the hospital's equipment. Chirag also assisted local health professionals with community health initiatives, such as workshops on hygiene and disease transmission.

Students Receive Poster Awards in Four Areas at Drexel Research Day 2010
Students from BIOMED won poster awards in four categories at the Annual Drexel Research
Day Awards held on April 15, 2010, at the Daskalakis Athletic Center. The names of the

BIOMED award recipients are listed below:

Bio and Biomedical - Undergraduate

"Evidence That Transrenal DNA is Derived from Apoptotic Cells" – Veerpal Dhillon Co-Authors: S. Lin, S. Jain, T.M. Block, Y.H. Su (Advisor: Y.H. Su)

Computation and Bio-modeling – Undergraduate

"Fibroblast Growth Factor - 2 Binding to the Endothelial Basement Membrane Peaks at a Physiologically Relevant Shear Stress and Exhibits Catch-Slip Binding Behavior" – Karl Reisig (Advisor: A.M. Clyne)

Bio and Biomedical - Graduate

"N-Cadherin-Mediated Mechanosensitivity and its Role in Cardiac Mechanotransduction" – Anant Chopra

Co-Authors: E. Tabdanov, H. Patel, H. Patel, P. Janmey (Advisor: Y. Kresh)

Translational and Clinical – Graduate

"Optical Brain Imaging to Enhance UAV Operator Training, Evaluation, and Interface Development" – Justin Menda

Co-Authors: J. Hing, H. Ayaz, P. Shewokis, K. Izzetoglu, B. Onaral, P. Oh (Advisor: B. Onaral)

Kara Spiller Receives a Fulbright Fellowship for International Study Abroad

Kara Spiller, Ph.D. candidate in BIOMED (Advisor: A. Lowman), received a Fulbright Fellowship for international study abroad. As a Fulbright scholar in Portugal, Kara will conduct research in tissue engineering from October 2010 to May 2011 in the Biomaterials, Biodegradables, and Biomimetics Research Group and the Headquarters of the European Institute of Excellence on Tissue Engineering and Regenerative Medicine. The grant will also support her work in developing international education initiatives in biomedical engineering.

Kara Spiller Receives the Second Wake Forest Institute for Regenerative Medicine Young Investigator Award

Kara Spiller, Ph.D. candidate in BIOMED (Advisor: A. Lowman), was selected as one of two recipients for the second Wake Forest Institute for Regenerative Medicine Young Investigator Award to be presented along with a \$2,500 prize at the 2009 Tissue Engineering & Regenerative Medicine Society World Congress (TERMIS-WC) meeting in Seoul, Korea in August. The award recognizes outstanding achievements of young investigators to foster

career development and encourage them to find solutions to the problems of regenerative medicine.

Kara Spiller Receives an NSF International Research Experiences for Students (IRES) and Doctoral Dissertation Enhancement Projects (DDEP) Grant

Kara Spiller, Ph.D. candidate in BIOMED (Advisor: A. Lowman), received a National Science Foundation International Research Experiences for Students (IRES) and Doctoral Dissertation Enhancement Projects (DDEP) grant in the amount of \$15,000 for her project "Engineering Smart Biomaterials for Cartilage Tissue Engineering: A Drexel University and Shanghai Jiao Tong Training Partnership." The grant will fund Kara's trip to Shanghai Jiao Tong University (SJTU) this fall to work in the Shanghai Key Tissue Engineering Laboratory under Yilin Cao and Wei Liu.

John Eisenbrey and Kara Spiller Receive 2010 Graduate Research Awards

John Eisenbrey (Advisor: M. Wheatley) and Kara Spiller (Advisor: A. Lowman), both doctoral students in BIOMED, received the 2010 Drexel University Graduate Research Award. Both John and Kara each received an award check for \$500 at a reception held in the Paul Peck Alumni Center on June 1, 2010.

John Eisenbrey Wins the "Most Popular Poster by Peers" Award at the 2009 BIOMED Talent & Technology Open House Poster Competition

John Eisenbrey, graduate student in BIOMED (Advisor: Margaret Wheatley), won "Most Popular Poster by Peers" Award at the 2009 BIOMED Talent & Technology Open House Poster Competition, held at the Bossone Research Enterprise Center on October 20, 2009, for his poster "In situ Doxorubicin Delivery through Ultrasound Triggered Generation of Nanoshards from Polymeric Contrast Agents."

John Eisenbrey Wins Second Place Prize in the Nano-Bio Category at the "Discovery to Commercialization Conference" Poster Competition

John Eisenbrey, graduate student in BIOMED (Advisor: Margaret Wheatley), won the Second Place Prize in the Nano-Bio Category at the "Discovery to Commercialization Conference" Poster Competition, held at the Chemical Heritage Institute, Philadelphia, PA, on October 15 – 16, 2009, for his poster "In situ Doxorubicin Delivery through Ultrasound Triggered Generation of Nanoshards from Polymeric Contrast Agents."

Michael Meyers and Abhishek Yeleswarapu Receive Honorable Mention in Drexel University Freshmen Writing Contest

Michael Meyers and Abhishek Yeleswarapu, both undergraduate students in BIOMED, received Honorable Mention in the Drexel University Freshmen Writing Contest. Michael's paper was titled "Bilingual Thinking" and Abhishek's paper was titled "I Hope Your Brain and Vertebral Discs Feel Better." Both Michael and Abhishek were honored for their work at the English Awards Ceremony, held in Behrakis Hall on May 21, 2010.

Xu Meng Is Selected as an NSF Fellow To Attend the 9th international Summer School on Biocomplexity from Gene to System in Istanbul, Turkey

Xu Meng, doctoral candidate and Calhoun Fellow in BIOMED (Advisor: A. Rosen), was selected as an NSF Fellow to attend the 9th international Summer School on Biocomplexity

from Gene to System, held July 1-7, 2010 in Istanbul, Turkey.

Dheeraj Roy Wins First Prize in the Biomedical Engineering Track at the Third Annual IEEE Graduate Forum Research Symposium

Dheeraj Roy, BS/MS student in BIOMED (Advisor: K. Barbee), was awarded First Prize in the Biomedical Engineering track at the Third Annual IEEE Graduate Forum Research Symposium, held at the Bossone Research Enterprise Center on February 26, 2010, for his poster "Microtopography-induced Alignment of Endothelial Cells Increases Expression and Membrane Localization of Cav-1 and eNOS."

Dheeraj Roy, Shruti Gour, and Kevin Freedman Win Second Place Prize in the 2009 Global Entrepreneurship Week (GEW) Pitch Competition

Dheeraj Roy, BS/MS student in BIOMED (Advisor: K. Barbee), Shruti Gour, graduate student in BIOMED (Advisor: Yury Gogotsi), and Kevin Freedman (Advisor: MinJun Kim), won the Second Place Prize of \$400 in the 2009 Global Entrepreneurship Week (GEW) Pitch Competition titled "Green to Gold Concepts to Change the World: People, Prosperity & Planet," hosted by the Baiada Center and Drexel Green on November 19, 2009, for their project "Carbon Nanotube Filter to Reduce Greenhouse Effect."

Shruti Gour and Dheeraj Roy Are Selected for the 2010 Baiada Incubator Competition Shruti Gour, graduate student in BIOMED (Advisors: E. Papazoglou and Y. Gogotsi), and Dheeraj Roy, BS/MS student in BIOMED (Advisor: K. Barbee), were selected as one of six teams to compete in the 2010 Baiada Incubator Competition for their project "CardioTech Solutions." The teams will compete for space in the Baiada Center's incubator to start their businesses.

Shruti Gour Wins Materials Today 2009 Image Competition

Shruti Gour, graduate student in BIOMED (Advisors: E. Papazoglou and Y. Gogotsi), was a winner of the Materials Today 2009 Image Competition and had his winning image displayed as the cover for the March 2010 journal issue. His winning image and description can be viewed at:

http://www.materialstoday.com/mt/cover-comp/2009

Shruti Gour and Dheeraj Roy Are Selected as One of Top Ten Artists in the NanoArt 2009 International Online Competition

Shruti Gour, graduate student in BIOMED (Advisors: E. Papazoglou and Y. Gogotsi), and Dheeraj Roy, BS/MS student in BIOMED (Advisor: K. Barbee), were selected as one of the top ten artists in the NanoArt 2009 International Online Competition. Shruti and Dheeraj were chosen from a total of 48 artists from 15 countries for their artwork titled "Eggshells."

Nicholas Pashos Wins First Prize in the Undergraduate Category of the 2010 International Society of Pharmaceutical Engineers Del-Val Poster Competition Nicholas Pashos, undergraduate student in BIOMED, (Advisor: M. Wheatley and M. Shanbhag), won first prize in the undergraduate student category of the 2010 International Society of Pharmaceutical Engineers (ISPE) Delaware Valley student poster competition for the project "Mechanical Properties of Biocompatible and Biodegradable Hydrogel Scaffolds."



Archana Nagaraja Wins First Prize in the Graduate Category of the 2010 International Society of Pharmaceutical Engineers Del-Val Poster Competition

Archana Nagaraja, graduate student in BIOMED, (Advisor: M. Wheatley), won first prize in the graduate student category of the 2010 International Society of Pharmaceutical Engineers (ISPE) Delaware Valley student poster competition for the project "Curcuminloaded Ultrasound Contrast Agents for Drug Delivery to Tumor Cells."

Kevin Freedman Wins Integrative Graduate Education and Research Traineeship (IGERT) Fellowship

Kevin Freedman, BS/MS student in BIOMED and doctoral student in MEM (Advisor: M.J. Kim), was a Drexel 2010 National Science Foundation Graduate Research Fellowship Program (NSF GRFP) recipient. The NSF GRFP provides three years of funding and stipends for research-oriented graduate study in the sciences. Kevin will receive a \$30,000 monthly stipend, plus tuition and fees to continue his graduate education.

Dannielle Figueroa Receives NSF East Asia and Pacific Summer Institutes Fellowship Dannielle Figueroa, graduate student in BIOMED (Advisor: Alisa Clyne), received a \$3,000 NSF East Asia and Pacific Summer Institutes (EAPSI) Fellowship and will be the PI for the project "Basement Membrane Collagen Orientation in Response to Stretch on Native and Glycated Collagen" that she will work on in collaboration with Dr. Jennifer Shin at the Korea Advanced Institute of Science and Technology (KAIST) in South Korea, from June 2010 – August 2010.

Dannielle Figueroa Receives a 2010 United Negro College Fund (UNCF) – Merck Graduate Science Research Dissertation Fellowship

Dannielle Figueroa, graduate student in BIOMED (Advisor: Alisa Clyne), received a 2010 United Negro College Fund (UNCF) – Merck Graduate Science Research Dissertation Fellowship in the amount of \$42,000 for the 2010 – 2011 academic year. Dannielle works with Dr. Clyne in the Vascular Kinetics lab. The UNCF-Merck Science Initiative Awards provide a stipend, research support for supplies and travel, mentorship experience with a Merck research scientist, and access to Merck's labs, to twelve top African-American students in life sciences.

Karl Reisig Wins Steinbright Career Development Center 2010 Co-op Award Karl Reisig, undergraduate student in BIOMED, won a Steinbright Career Development Center 2010 Co-op Award for fulfilling the goals and ideals of cooperative education. Karl was honored along with other Co-op Award recipients at the Paul Peck Alumni Center on May 4, 2010.

Gregory Botta Receives NIH Fellowship Grant for Alcohol Inflammatory Chemokine and Fibrosis Induced Reactive Oxygen Species Project

Gregory Botta, graduate student in the BIOMED MD/PhD program (Advisor: P. Lelkes), received an NIH Fellowship Grant in the amount of \$41,100 for a period of four years for the project "Alcohol Inflammatory Chemokine and Fibrosis Induced Reactive Oxygen Species."



Claire Martin Receives an International Research and Education in Engineering (IREE) 2010 China Program Fellowship

Claire Martin, undergraduate in BIOMED, was among 59 students out of a total of 300 applicants to receive an International Research and Education in Engineering (IREE) 2010 China Program Fellowship. The IREE Program is sponsored by the National Science Foundation and provides undergraduate awardees a \$3,000 stipend to work on frontier engineering research projects in university, industry, or government labs in China from May – August 2010.

Kelsey Pagdon Is Invited as a Guest Speaker at the Young Women's Conference in Science and Math Technology

Kelsey Pagdon, undergraduate in BIOMED, was an invited guest speaker at the Young Women's Conference in Science and Math Technology, held at Princeton University on March 12, 2010 and sponsored by the Princeton Plasma Physics Laboratory (PPPL), where Kelsey worked during Summer 2009. The goal of the conference was to increase interest in science, mathematics and technology, as well as foster an awareness of varied career opportunities for women.

Jawadali Ahmed, Steven Leonhardt, and Thomas Nguyen Are Selected as Team Finalists In the Baiada 2010 Business Concept Competition

Jawadali Ahmed, Steven Leonhardt, and Thomas Nguyen, all undergraduate students in BIOMED, were selected as one of ten team finalists in the Laurence A. Baiada Center for Entrepreneurship 2010 Business Concept Competition for "Bräekalehg," a business plan centered on knee rehabilitation via a telemedicine system that can be used at home at the patient's convenience, with progress monitored by a health care practitioner in real-time through live video sessions.

Sumona Sarkar Wins the Silver Award for Best Student Paper at the 2nd International Symposium on Surface and Interface of Biomaterials (ISSIB-II)

Sumona Sarkar, graduate student in BIOMED (Advisor: M. Marcolongo), won the Silver Award and a \$250 prize for the Best Student Paper at the 2nd International Symposium on Surface and Interface of Biomaterials (ISSIB-II), held January 4 – 6, 2010 in Hong Kong, for her paper "Chondroitin Sulfate Immobilization for the Fabrication of Biomimetic Brush Structures."

Aykan Karabudak Is Selected as One of NASA's Best and Brightest Interns and Fellows for the NASA Student Ambassador Program

Aykan Karabudak, BS/MD student in BIOMED, was selected as one of NASA's 105 best and brightest interns and fellows for the NASA Student Ambassador Program. The agency uses the program to engage undergraduate and graduate students in NASA science, technology, engineering and mathematics (STEM) research and interactive opportunities.

Cameron Birch and Omkar Baxi Are Named Triangle Editor-in-Chief and News Editor Cameron Birch and Omkar Baxi, both undergraduate students in BIOMED, were named Editor-in-Chief and News Editor of the Drexel Triangle, respectively.

FACULTY AND STAFF AWARDS AND HONORS

BIOMED Faculty Receive 2010 Wallace H. Coulter Translational Research GrantsThe following BIOMED faculty members received a 2010 Wallace H. Coulter Translational Research Grant:

Dr. Greg Fridman, Research Assistant Professor in BIOMED, Dr. Richard Hamilton (CoM), Dr. Suresh Joshi (CoM), and Dr. Mark Ingerman (Lankenau Hospital), received \$42,000 in Coulter funding for the project "Fast Plasma-assisted Hand Disinfection or Sterilization System."

Dr. Peter Lelkes, Calhoun Chair Professor of Cellular Tissue Engineering in BIOMED, Dr. Elisabeth Papazoglou, Associate Professor in BIOMED, and Professor Michael Weingarten (CoM), received \$10,000 in Coulter funding for the project "Bioactive Alimentary Proteinbased Scaffolds (APS) for Wound Healing and Regenerative Medicine."

Dr. Kurtulus Izzetoglu, Research Assistant Professor in BIOMED, Dr. Kambiz Pourrezaei, Professor in BIOMED, and Dr. Jay Harrow (CoM), received \$81,700 in Coulter funding for the project "Functional Near-infrared Spectroscopy as a Monitor for Depth of Anesthesia."

Dr. Ken Barbee, Associate Professor in BIOMED, Dr. Michele Marcolongo (MSE), Dr. Caroline Schauer (MSE), and Dr. Edward Vresilovic (Hershey Medical Center), received \$111,000 in Coulter funding for the project "Treatment of Lower Back Pain Utilizing a Biomimetic Aggrecan Injection."

Dr. Wan Y. Shih, Associate Professor in BIOMED, Dr. Wei H. Shih (MES), Dr. Ying-Hsiu Su (CoM), and Dr. Kenneth Rothstein (CoM), received \$54,400 in Coulter funding for the project "Development of a Urine Screening Test for Liver Cancer."

Dr. Elisabeth Papazoglou, Associate Professor in BIOMED, and Dr. Jouni Uitto (Thomas Jefferson University), received \$98,900 in Coulter funding for the project "Syk Kinase as a Biomarker of Skin UV Damage and Photocarcinogenesis."

Dr. Andres Kriete Gives an Invited Talk on Systems Biology and Aging at the Santa Fe Institute and at the National Institute of Aging

Dr. Andres Kriete, Associate Professor in BIOMED, gave an invited talk on "Systems Biology and Aging: A Search for Consistencies across Scales," at the Conference on Systems Biology and the Physical Foundations of Aging, held July 27 – 29, 2009 at the Santa Fe Institute, Santa Fe, NM. Dr. Kriete also gave an invited talk on "A Computational Systems Biology Approach to Cellular Aging using Feedback-Loop Motifs Mediated by Stress Responses," at the Conference on Systems Biology of Human Aging, held December 8 – 9, 2009 at the National Institute of Aging, Baltimore, MD.

Dr. Andres Kriete Is Invited to Talk on Cell Systems Modeling of Aging at the First Symposium on Systems Approaches to Parkinson's Disease

Dr. Andres Kriete, Associate Professor in BIOMED, was invited to talk on "Cell Systems

Modeling of Aging Phenotypes using Fuzzy Logic" at the First Symposium on Systems Approaches to Parkinson's Disease on August 18, 2010 at the National University of Ireland Maynooth, Ireland.

Dr. Arye Rosen Receives 2010 Microwave Career Award from the IEEE Microwave Theory and Techniques Society (MTT-S)

Dr. Arye Rosen, Academy Professor of Biomedical and Electrical Engineering, received the 2010 Microwave Career Award from the IEEE Microwave Theory and Techniques Society (MTT-S). This award honors an individual for a career of meritorious achievement and outstanding technical contribution in the field of microwaves. MTT-S is one of the oldest, largest and highly respected societies of IEEE. The 2010 Microwave Career Award will be conferred at the annual Society Awards Banquet to be held during the International Microwave Symposium the week of May 23 to 28, 2010 in Anaheim, California.

Dr. Arye Rosen and Colleagues Edit a Special Issue on RF and Microwave Techniques in Wireless Implants and Biomedical Applications of the IEEE Transactions on Microwave Theory and Techniques

Dr. Arye Rosen, Academy Professor of Biomedical and Electrical Engineering, and his colleagues Wentai L.G. Liu and Mohammad-Reza Tofighi, edited a special Issue on RF and Microwave Techniques in Wireless Implants and Biomedical Applications of the IEEE Transactions on Microwave Theory and Techniques, October 2009. Advances in RF and microwaves have created opportunities for the use of wireless medical devices such as implants, vital sign monitoring, imaging and surgery.

Dr. Banu Onaral Leads Delegation of Biomed Faculty to Israel to Forge Partnerships and Collaborative Life Saving Solutions Research Agreements

Dr. Banu Onaral, H. H. Sun Professor and Director, School of Biomedical Engineering, Science and Health Systems, led a delegation of School of Biomed faculty, including Dr. Dov Jaron, Calhoun Distinguished Professor of Engineering in Medicine in BIOMED, Dr. Kurtulus Izzetoglu, Research Assistant Professor in BIOMED, and Dr. Baruch Ben Dor, Entrepreneur-in-Residence in BIOMED, to Israel to visit Tel Aviv University, Hebrew University, and the University of Haifa to forge partnerships and collaborative Life Saving Solutions research agreements. The School of Biomed's relationship with Israeli schools started with research collaborations between professors at the School and in Israel. In addition, Drexel's Louis and Bessie Stein Family Foundation Fellowship have provided funding for collaborative research between School of Biomed faculty and Israeli schools.

Dr. Banu Onaral Serves on the 'Innovating with Trust' Panel at China Business Boot Camp Philadelphia

Dr. Banu Onaral, H. H. Sun Professor and Director, School of Biomedical Engineering, Science and Health Systems, served on the 'Innovating with Trust' panel at China Business Boot Camp Philadelphia, held on February 18, 2010 at the Union League. Dr. Onaral will elaborate on the translational research and technology commercialization bridges the School is building with academic peers and industrial partners in China through the School's alumni, friends, benefactors and stakeholders. China Business Boot Camp is one of the key USA-based programs of The China Business Network and is designed to provide practical answers; namely, a knowledge of what really works when doing business in China and what



School of Biomedical Engineering, Science, & Health Systems

resources are available in the region and beyond, to help us win in every China business challenge.

Drs. Banu Onaral, Kurtulus Izzetoglu, John Domzalski, and Patricia Shewokis Receive a Defense University Research Instrumentation Program (DURIP) Award for their Project "Optical Brain Imaging System to Monitor Brain Activity"

Dr. Banu Onaral, H. H. Sun Professor and Director, School of Biomedical Engineering, Science and Health Systems (PI), Dr. Kurtulus Izzetoglu, Research Assistant Professor in BIOMED (Co-PI), Dr. John F. Domzalski, Research Professor in BIOMED, and Dr. Patricia A. Shewokis, Associate Professor in CoNHP, received a Defense University Research Instrumentation Program (DURIP) Award from the Army Research Office (ARO) for \$210,000 for their project "Optical Brain Imaging System to Monitor Brain Activity."

Drs. Banu Onaral, Kurtulus Izzetoglu, Kambiz Pourrezaei, and Patricia Shewokis Are Awarded a U.S. Army Medical Research and Materiel Command (USAMRMC) / Telemedicine and Advanced Technology Research Center (TATRC) Grant for their **Project "Development of Warfighter Cognitive Performance Indices"**

Dr. Banu Onaral, H. H. Sun Professor and Director, School of Biomedical Engineering, Science and Health Systems (PI), Dr. Kurtulus Izzetoglu, Research Assistant Professor in BIOMED (Co-PI), Dr. Kambiz Pourrezaei, Professor in BIOMED (Co-PI), and Dr. Patricia Shewokis, Associate Professor in CoNHP (Co-PI), were awarded a U.S. Army Medical Research and Materiel Command (USAMRMC) / Telemedicine and Advanced Technology Research Center (TATRC) grant for \$1.7 million for the period Aug 10, 2009 - March 9, 2011 for their project "Development of Warfighter Cognitive Performance Indices."

Dr. Donald McEachron and Colleagues Are Among the Drexel Engineering Cities Initiative Five Finalists for Their Proposal "Daylighting, Daylight Simulation and Public Health"

Dr. Donald McEachron, Research Professor and Associate Director in BIOMED (PI), and colleagues Dr. Neal Handly (CoM), Dr. Jin Wen (CA&E), Dr. Caroline Schauer (MS&E), and Dr. Eugenia Ellis (CoMAD), were among the five finalists of the Drexel Engineering Cities Initiative (DECI) 2009 Cross-Disciplinary Research Grant Competition. They were awarded \$4,000 for their successful proposal, "Daylighting, Daylight Simulation and Public Health," which stood out in terms of its comprehensibility, as well as its potential for future funding and additional collaboration. The next stage of the process is a daylong DECI workshop in November 2009 for all five winning papers.

Dr. Donald McEachron and Colleagues Receive NSF Grant for Drexel University Robert Noyce Scholarship Program - Phase II

Dr. Donald L. McEachron, Research Professor and Associate Director in BIOMED (Co-PI), and colleagues Dr. Sheila R. Vaidya (PI), Associate Professor of Education, Associate Director of Research and Outreach Director in SoE, and Patricia H. Russell (Co-PI), Associate Dept. Head / Senior Lecturer in the Dept. of Mathematics, received an NSF grant of \$600,000 for their project titled "The Drexel University Robert Noyce Scholarship Program (DUNS) - Phase II" for a period of four years. The project is a partnership between the School of Education, the School of Biomedical Engineering, Science and Health Systems, the Mathematics Department of the College of Arts and Sciences and the School District



of Philadelphia. The Phase II program was designed as a follow-up to a previous NSF grant, for which \$494,000 was granted, to continue the School of Education's work toward narrowing the nation's achievement gap in mathematics and science. The program focuses on the need to attract talented individuals to secondary school mathematics and science teaching, preparing them for success in high-need schools.

Dr. Dov Jaron Is Elected as a Member of the Polish Academy of Sciences

Dr. Dov Jaron, Calhoun Distinguished Professor of Engineering in Medicine in BIOMED, was elected as a member of the Polish Academy of Sciences. Election to the Polish Academy of Sciences is considered an extremely high honor, as it is for life and the number of national members of the Academy is set at no more than 350. All members (national and foreign) are elected by the General Assembly from among candidates with the highest scientific achievements. Only a small number of individuals from outside of Poland have been elected as foreign members of the Academy.

Dr. Dov Jaron Receives "Research Experience for Undergraduates" (REU) NSF Grant Dr. Dov Jaron, Calhoun Distinguished Professor of Engineering in Medicine in BIOMED, received a one-year \$8,00 "Research Experience for Undergraduates" (REU) NSF grant to support two students who will work on his research project.

Dr. Elaine Thompson Is Featured in the Philadelphia Business Journal for her Career History and Leadership Style as President of Lankenau Hospital

Dr. Elaine Thompson, Executive in Residence in BIOMED, was featured in a Philadelphia Business Journal article regarding her career history and her leadership style as President of Lankenau Hospital in Wynnewood, PA.

Dr. Elisabeth Papazoglou, Dr. Sundar Nadarajan, and Colleagues Receive a 2010 "Grants for Research Impact at Drexel" (GRID) Synergy Award

Dr. Elisabeth Papazoglou, Associate Professor in BIOMED (PI), Dr. Sundar Nadarajan, Research Assistant Professor in BIOMED, Dr. Moses Noh (MEM), and Dr. Sreekant Murthy (CoM), received a "Grants for Research Impact at Drexel" (GRID) Synergy Award for 2010 for their joint project titled "Microfabricated QLISA Biosensor with Embedded Mixing Elements." This award is given to promote new collaborative research between or among faculty members of different departments and provide the maximum impact upon research at Drexel.

Dr. Elisabeth Papazoglou's Near Infrared (NIR) Diagnostics Team Is Cited in a New York Times Article on "How to Win a Business Plan Competition"

Dr. Elisabeth Papazoglou, Associate Professor in BIOMED, was a technical advisor to the Drexel-Penn NIR Diagnostics team that was cited in the June 10, 2009 edition of The New York Times in an article titled "How to Win a Business Plan Competition," in recognition of their winning the 2009 Wharton Business Plan competition for their project titled "Near Infrared (NIR) Diagnostics" (since renamed "Lumina Diagnostics"). To read the article in its entirety, please visit:



Dr. Elliot Sloane Gives Presentation on Medical Device Security at the National Institute of Standards (NIST) and HHS Office of Civil Rights (OCR) Annual Meeting Dr. Elliot Sloane, Research Associate Professor and Director of Health Systems Engineering in BIOMED, presented "Medical Device Security" at the National Institute of Standards (NIST) and HHS Office of Civil Rights (OCR) Annual Meeting on Safeguarding

Dr. Elliot Sloane, Research Associate Professor and Director of Health Systems Engineering in BIOMED, presented "Medical Device Security" at the National Institute of Standards (NIST) and HHS Office of Civil Rights (OCR) Annual Meeting on Safeguarding Health Information: Building Assurance through HIPAA Security, held May 11-12, 2010 in Washington, DC. Dr. Sloane also presented at INOVIZ 2010 in Izmir, Turkey on May 24-25, 2010.

Dr. Elliot Sloane Is Selected as the 2010 Recipient of the Association for the Advancement of Medical Instrumentation (AAMI) Foundation / Institute for Technology in Health Care Clinical Application Award

Dr. Elliot Sloane, Research Associate Professor and Director of Health Systems Engineering in BIOMED, was selected as the 2010 recipient of the Association for the Advancement of Medical Instrumentation (AAMI) Foundation / Institute for Technology in Health Care Clinical Application Award. Dr. Sloane will receive this award at the Dwight E. Harken, MD, Memorial Lecture and Awards Luncheon at the AAMI Annual Conference & Expo in Tampa, FL on June 27, 2010.

Dr. Elliot Sloane Moderates Workshop at the Third Annual Health Informatics Symposium at Children's Hospital of Philadelphia Center for Biomedical InformaticsDr. Elliot Sloane, Research Associate Professor and Director of Health Systems Engineering in BIOMED, was a moderator for the workshop "Meaningful Use Town Hall," held at the Third Annual Health Informatics Symposium at the Children's Hospital of Philadelphia (CHOP) Center for Biomedical Informatics on April 30, 2010 in Philadelphia, PA.

Dr. Elliot Sloane Is Selected as Parliamentarian Judge for the 2011 Code-a-Thon Planning Committee on US Electronic Health Record Interoperability

Dr. Elliot Sloane, Research Associate Professor and Director of Health Systems Engineering in BIOMED, was selected as an official parliamentarian judge for the 2011 Code-a-Thon Planning Committee at the symposium CONNECT: Code-a-Thon Challenge and Executive Briefing and Tutorials of the US Electronic Health Record Interoperability, held April 28-29, 2010 in Miami, FL.

Dr. Elliot Sloane Chairs the Electronic Health Records (EHR) and the Personal Health Records (PHR) Tracts of the AMA-IEEE Medical Technology Conference on Individualized Healthcare

Dr. Elliot Sloane, Research Associate Professor and Director of Health Systems Engineering in BIOMED, chaired the Electronic Health Records (EHR) and the Personal Health Records (PHR) tracts of the AMA-IEEE Medical Technology Conference on Individualized Healthcare, held March 21-23, 2010 in Washington, DC.

Dr. Elliot Sloane Co-chairs Interoperability Workshop on Cost-Effective Chronic Care Dr. Elliot Sloane, Research Associate Professor and Director of Health Systems Engineering in BIOMED, co-chaired the workshop "Interoperability Workshop: Leveraging the ONC/HITSP Roadmap for Cost-Effective Chronic Care" at the 2010 Annual Conference of the Health Information Management and Systems Society (HIMSS) meeting on Improving



Patient Care with Health Information Technologies, held February 28, 2010 in Atlanta, GA.

Dr. Elliot Sloane Launches Health Systems Engineering Program

Dr. Elliot Sloane, Research Associate Professor and Director of Health Systems Engineering in BIOMED, launched the School of Biomed Health Systems Engineering program, which will focus on integrative and interoperability research in health systems and e-health. The Health Systems Engineering curriculum will be developed in parallel.

Dr. Elliot Sloane Presents a Clinical Research Session at the Delaware Valley Chapter of the Healthcare Information and Management Systems Society (HIMSS) Meeting Dr. Elliot Sloane, Research Associate Professor and Director of Health Systems Engineering in BIOMED, presented a Clinical Research session for the Delaware Valley Chapter of the Healthcare Information and Management Systems Society (HIMSS) meeting on the Secondary Use of Data at the Children's Hospital of Philadelphia (CHOP) on January 28, 2010.

Dr. Elliot Sloane Moderates a Talk on Integration of the Healthcare Enterprise

Dr. Elliot Sloane, Research Associate Professor and Director of Health Systems Engineering in BIOMED, was a moderator for the talk "Successful Integration of the Healthcare Enterprise Deployment in the U.S." during the symposium "An Overview to Integrating the Healthcare Enterprise" at the 2010 Connectathon on January 12, 2010 in Chicago, IL. The Healthcare Information Management and Systems Society (HIMSS) and the Radiological Society of North America (RSNA) sponsored the event.

Dr. Greg Fridman and Colleagues Publish Article in the New Journal of PhysicsDr. Greg Fridman, Research Assistant Professor in BIOMED and Co-Director of the Plasma Biology and Medicine Lab, A.J. Drexel Plasma Institute, Dr. Alexander Fridman, John A. Nyheim Chair Professor in MEM, Dr. Danil Dobrynin (ECE), and Dr. Gary Friedman (ECE), published an article titled "Physical and Biological Mechanisms of Direct Plasma Interaction with Living Tissue" in the November 2009 issue of the New Journal of Physics.

Dr. Greg Fridman and Colleagues Are Cited in Plasma Pioneers Article

Dr. Greg Fridman, Research Assistant Professor in BIOMED and Co-Director of the Plasma Biology and Medicine Lab, A.J. Drexel Plasma Institute, and his colleagues were cited in an article "Plasma Pioneers" on the website WSOCTV.com regarding their research at the Drexel Plasma Institute. To read the article in its entirety, please visit:

http://www.wsoctv.com/health/23318763/detail.html

Dr. Fridman and his colleagues were also cited in the article "Philadelphia Scientists Experiment with High-tech Healing" on the 6abc News website:

http://abclocal.go.com/wpvi/story?section=news/health&id=7444428

Dr. John Domzalski Presents a Talk on Disaster Response and Crises Management Dr. John Domzalski, Research Professor and Director of the Bioterrorism Civilian Medical Response Center in BIOMED, presented a talk entitled "Disaster Response / Crises Management: An on the Ground Perspective" at the Drexel University Homeland Security Philadelphia Student Chapter (HSPSC) 2010 Spring Seminar Series on May 19, 2010.



Dr. Kambiz Pourrezaei and Ravjyot Khuman Provide Technical Expertise and Aid for Haitian Earthquake Victims as Part of Drexel's weServe Haiti Program

Dr. Kambiz Pourrezaei, Professor in BIOMED, Ravjyot Khuman, BS/MS student in BIOMED, Dr. Michel François, Adjunct Professor in ECE, and Lauren Clay, graduate student in the School of Public Health, traveled to Haiti as part of Drexel's weServe Haiti program to provide technical expertise and assistance to Haitian earthquake victims by using technical knowledge developed at Drexel. The team met with the Haitian health minister and local hospitals during their trip, with future trips to be focused on the private sector.

Dr. Kambiz Pourrezaei and Colleagues Receive a Ben Franklin Technology Development Authority (BFTDA) Grant to Support the Nanotechnology Institute (NTI) Dr. Kambiz Pourrezaei, Professor in BIOMED (PI), and colleagues at the Nanotechnology Institute (NTI) received a \$1.5 million two-year grant via the Ben Franklin Technology Partners of Southeastern PA, in partnership with the University of Pennsylvania and Drexel University, from the Ben Franklin Technology Development Authority (BFTDA) university research grant program. NTI will emphasize commercialization of nanotechnology research inventions, entrepreneurship, and job creation and later-stage technologies with a near-to-market window with a specific focus on nanotechnology in drug discovery, drug delivery and healthcare.

Dr. Karen Moxon and Lab Members Publish Papers in the Journal of Neuroscience, Neural Computation, and the Journal of Neurophysiology

Guglielmo Foffani, Research Associate Professor, published "Spinal Cord Injury Immediately Changes the State of the Brain" (Aguilar J, Humanes-Valera D, Alonso-Calviño E, Yague JG, Moxon KA, Oliviero A, Foffani G), in the Journal of Neuroscience, in press, 2010.

Alessandro Scaglione, doctoral candidate in BIOMED, published "General Poisson Exact Breakdown of the Mutual Information To Study the Role of Correlations in Population Codes" (Scaglione A, Moxon KA, Foffani), in the journal Neural Computation, June 22, 2010.

Dane Grasse, doctoral candidate in BIOMED, published "Method for Correcting the Bias in the Estimate of the Spike Field Coherence due to Finite Number of Spikes" (Grasse D, Moxon K.A.), in the Journal of Neurophysiology, May 19, 2010.

Dr. Karen Moxon and Lab Members Present Posters at Several National Conferences Alessandro Scaglione, doctoral candidate in BIOMED, presented "Spike Correlations within Neurons and Redundancy between Neurons for Encoding Stimulus Location in the Rat VPM Thalamus" (A. Scaglione, K. A. Moxon, J. Aguilar, G. Foffani) at the Society for Neuroscience 2009 in Chicago, IL.

Alessandro Scaglione, doctoral candidate in BIOMED, presented "Role of Variability in the Representation of Information" (A. Scaglione, K. A. Moxon) at the Neural Basis of Vibrissabased, Tactile Sensation Meeting, HHMI at the Janelia Farm Research Campus, VA, held April 25-28, 2010.

Robert Flint, graduate student in BIOMED, presented "Decoding the Intent To Perform a Skilled Hindlimb Movement in the Rat from the Activity of Cortical Infragranular Cells" (R.



Flint, III, K. Moxon) at the Society for Neuroscience, 2009 in Chicago IL.

Eric Knudsen, graduate student in BIOMED, presented "Combined Rehabilitative Therapies following Spinal Cord Injury Induce Cortical Reorganization" (E. B. Knudsen, K. A. Moxon, E. A. Dugan, R. D. Flint, J. S. Shumsky) at the Society for Neuroscience, 2009 in Chicago IL.

Dane Grasse, doctoral candidate in BIOMED, presented "A Bias Correction for Spike Field Coherence Estimation" (D. Grasse, K. Moxon) at the Society for Neuroscience, 2009 in Chicago IL.

Dane Grasse, doctoral candidate in BIOMED, presented "Estimating Spike Field Coherence during Seizure Initiation" (D. Grasse, K. Moxon) at the American Epilepsy Society in Boston MA on December 4-8, 2009.

Guglielmo Foffani, Research Associate Professor, presented "Slow-wave Activity Asymmetrically Propagates from the Intact Cortex to the Deafferented Cortex Immediately after Complete Transaction of the Spinal Cord" (J. Aguilar, D. Humanes-Valera, E. Alonso-Calvino, J. G. Yague, K. A. Moxon, A. Oliviero, G. Foffani) at the Society for Neuroscience, 2009 in Chicago, IL.

Dr. Karen Moxon Delivers Invited Neuroengineering Presentations

Dr. Karen Moxon, Associate Professor in BIOMED, presented "The Effect of State Dependent Changes on Information Processing in the Rat Trigeminal System" at the Neural Basis of Vibrissa-based, Tactile Sensation Meeting, HHMI at the Janelia Farm Research Campus, VA, held April 25-28, 2010. Dr. Moxon also presented "Neurorobotic Control in a Rat Model of Spinal Cord Injury" at the New Jersey Institute of Technology Department of Biomedical Engineering Seminar Series in Newark, NJ on February 19, 2010; and "Exercise Induced Reorganization in the Somatosensory Cortex after Complete Spinal Transaction" at the Hospital Nacional de Parapléjicos, SESCAM, in Toledo, Spain on April 26, 2010.

Dr. Karen Moxon Serves as Workshop Moderator at IEEE-EMBS Forum on Grand Challenges in Neuroengineering

Dr. Karen Moxon, Associate Professor in BIOMED, served as moderator for "Interfacing Brain with Machine" at the IEEE-EMBS Forum on Grand Challenges in Neuroengineering, held on May 7-8, 2010 in Bethesda MD.

Dr. Karen Moxon Receives Funding from the International Foundation for Research in Paraplegia for Neurorobotic Control for Restoration of Lower-Limb Function Project Dr. Karen Moxon, Associate Professor in BIOMED (PI), will receive funding in the amount of \$140,000 from the International Foundation for Research in Paraplegia (Zürich) for the period May 1, 2010 to April 30, 2011 for her project "Neurorobotic Control for Restoration of Lower-Limb Function in a Rat Model of Complete Spinal Cord Transection."

Dr. Karen Moxon Receives NIH Grant for Spinal Cord Injury Project

Dr. Karen Moxon, Associate Professor in BIOMED (PI), and Dr. Jed Shumsky in COM (Co-I), Department of Neurobiology, received a four-year, \$1.3 million National Institutes of Health grant for the project "Brain Reorganization After Spinal Cord Injury." The goal of this project



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is to determine if the cortical reorganization induced in response to therapeutic interventions after spinal cord injury (SCI) contributes to improved functional recovery. This work will establish the role of cortical plasticity in functional recovery after SCI.

Dr. Peter Lelkes and Colleagues Win First Place in the American Ceramic Society Ceramographic Competition

Dr. Peter Lelkes, Calhoun Chair Professor of Cellular Tissue Engineering in BIOMED (Co-PI), Dr. Jack Zhou (PI – MEM), Dr. Qingwei Zhang (DUCoM), Dr. Vadym Mochalin (MSE), and Dr. Yury Gogotsi, (MSE), won first place in the American Ceramic Society Ceramographic Competition for the poster "Fluorescent Nanodiamond Reinforced PLLA Scaffolds for Tissue Engineering and Bone Repair."

Dr. Peter Lelkes Chairs Surgical Engineering Enterprise (SEE) Workshop

Dr. Peter Lelkes, Calhoun Chair Professor of Cellular Tissue Engineering in BIOMED and Scientific Director of the Surgical Engineering Enterprise (SEE) in the College of Medicine, chaired the Translational Medicine and Applied Biotechnology Workshop, held at the College of Medicine on January 28, 2010. The workshop, "SEEing the Future: The Surgical Engineering Enterprise [SEE] and Beyond," focused on surgical engineering and interdisciplinary collaboration amongst various departments and schools at the University.

Dr. Peter Lelkes and Colleagues Receive a 2010 "Grants for Research Impact at Drexel" (GRID) Synergy Award

Dr. Peter Lelkes, Calhoun Chair Professor of Cellular Tissue Engineering in BIOMED (PI), and Dr. Edward Schulman (CoM), received a "Grants for Research Impact at Drexel" (GRID) Synergy Award for 2010 for their joint project titled "Human Lung Progenitor Cells for Pulmonary Tissue Engineering and Regenerative Medicine." This award is given to promote new collaborative research between or among faculty members of different departments and provide the maximum impact upon research at Drexel.

Dr. Peter Lelkes Appears in Philadelphia Business Journal Article on Medical TextilesDr. Peter Lelkes, Calhoun Chair Professor of Cellular Tissue Engineering in BIOMED, was quoted in a November 2, 2009 Philadelphia Business Journal article about a partnership between Philadelphia University and Drexel to develop medical textiles. The story also appeared in the Baltimore Business Journal, Business First of Buffalo, Boston Business Journal, Houston Business Journal, and at AllBusiness.com. For the full story, please visit: http://philadelphia.bizjournals.com/philadelphia/stories/2009/11/02/story10. html?b=1257138000%5e2353711

Drs. Peter Lewin and Elisabeth Papazoglou Receive an NIH – National Institute of Biomedical Imaging and Bioengineering (NIBIB) Grant for Wound Healing Research Dr. Peter A. Lewin, Richard B. Beard Distinguished University Professor of Biomedical and Electrical and Computer Engineering, Director, Biomedical Ultrasound Research and Education Center (PI), and Dr. Elisabeth Papazoglou, Associate Professor in BIOMED (Co-PI), received a \$2 million grant for a period of four years from the National Institute of Biomedical Imaging and Bioengineering (NIBIB) at NIH for their project "Acousto-optic Theragnostic Approach for Chronic Wound Management."



Dr. Peter Lewin Is Appointed for Life as a Consulting Resource Member of the Franklin Institute Committee on Science and Arts

Dr. Peter A. Lewin, Richard B. Beard Distinguished University Professor of Biomedical and Electrical and Computer Engineering, Director, Biomedical Ultrasound Research and Education Center, has been appointed for life as consulting resource member of the Committee on Science and Arts of The Franklin Institute, Philadelphia, PA. This committee is frequently referred to as an American "Nobel" Prize committee. Dr. Lewin has served on the Committee since 2000.

Dr. Peter Lewin Is Invited to Serve as a Member of the Advisory Board for the international Conference on Advanced Metrology for Ultrasound in Medicine.

Dr. Peter A. Lewin, Richard B. Beard Distinguished University Professor of Biomedical and Electrical and Computer Engineering, and Director of the Biomedical Ultrasound Research and Education Center, was invited to serve as a member of the Advisory Board for the international conference on Advanced Metrology for Ultrasound in Medicine. The conference is organized by the National Physical Laboratory of the United Kingdom and will take place there on May 12-14, 2010. The invitation reflects Dr. Lewin's being internationally recognized as one of the leading experts in ultrasound metrology and medical applications of ultrasound.

Dr. Peter Lewin and Colleagues Receive a DrexelMed Commonwealth Universal Research Enhancement (CURE) Award for 2010

Dr. Peter A. Lewin, Richard B. Beard Distinguished University Professor of Biomedical and Electrical and Computer Engineering, and Director of the Biomedical Ultrasound Research and Education Center (Co-PI), Dr. Andrew Kohut (CoM), Dr. Steven Kutalek (CoM), and Dr. Peter Kurnik (CoM), received a DrexelMed Commonwealth Universal Research Enhancement (CURE) Award for 2010 for their joint project titled "Development of the Cardiac Ultrasound Pacemaker."

Dr. Rami Seliktar Receives 2009-2010 Louis and Bessie Stein Family Fellowship for His Bias-Free Assessment of Muscle Force Potential Project

Dr. Rami Seliktar, Professor and Vice Director in BIOMED, and Professor Joseph Mizrahi, Pearl Milch Professor of Biomedical Engineering Sciences, Technion–Israel Institute of Technology, received a Louis and Bessie Stein award for their project "Bias-Free Assessment of Muscle Force Potential." These fellowships contribute to new advances in science and technology, as well as to true advancement in international relations by supporting new research collaborations between Drexel and well-known Israeli institutions.

Dr. Ryszard Lec and Colleagues Receive NSF Major Research Instrumentation Grant for Acquisition of 3-D Micromanufacturing Instruments for Bioengineering Research Dr. Ryszard Lec, Professor in BIOMED and Electrical and Computer Engineering (Co-PI), Dr. Moses Noh (PI, MEM), Dr. Alisa Morss Clyne (Co-Pi, MEM), Dr. Wei Sun (Co-PI, MEM), and Dr. Wei-Heng Shih (Co-PI, MSE) received a three-year \$344,330 National Science Foundation (NSF) Major Research Instrumentation (MRI) grant for the project "Acquisition of 3-D Micromanufacturing Instruments for Bioengineering Research at Drexel University." The project goal is to improve the quality and expand the scope of bioengineering research and training at Drexel by providing shared 3-D micromanufacturing instrumentation.



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Drs. Steven Kurtz and Marla Steinbeck Receive a National Institute of Arthritis and Musculoskeletal and Skin – NIH Grant for Their Disk Replacement Project

Dr. Steven Kurtz, Research Associate Professor in BIOMED (PI), and Dr. Marla Steinbeck, Research Associate Professor in BIOMED (Co-PI), received a \$1.25 million National Institute of Arthritis and Musculoskeletal and Skin (NIAMS) – NIH grant for a period of five years for their project "Wear, Inflammation and Clinical Performance of Total Disc Replacement."

Dr. Todd Doehring Receives an NIH Grant for His Nondestructive Real Time 3-D Imaging and Analysis of Cell-ECM in Live Tissue Engineering Project

Dr. Todd Doehring, Assistant Professor in BIOMED, received a one-year NIH grant in the amount of \$76,750 for the project titled "Nondestructive Real Time 3-D Imaging and Analysis of Cell-ECM in Live Tissue Engineering."

Drs. Wan Shih and Elisabeth Papazoglou Win Science Center QED Award

Dr. Wan Shih, Associate Professor in BIOMED, and Dr. Elisabeth Papazoglou, Associate Professor in BIOMED, won the University City Science Center's QED award for their respective projects "Portable, Low-Cost, Radiation-Free Breast Cancer Detector for Dense Breasts" (W.Y. Shih, A. Brooks, W.H. Shih, and L. Komarnicky) and "Near Infrared Wound Monitor" (E. Papazoglou, M. Weingarten, K. Pourrezaei, and L. Zubkov). Both Coulter Translational Partnership funded projects won QED follow-on funds out of a total of 70 applications from all of the regional universities. The inaugural competition was organized by the University City Science Center in partnership with the regional business development community.

Drs. Wan Shih Near and Elisabeth Papazoglou Are Noted in a Philadelphia Business Journal Article for Winning the Science Center QED Award

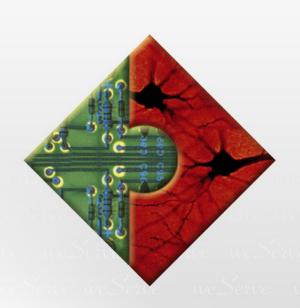
Dr. Elisabeth Papazoglou, Associate Professor in BIOMED, and Dr. Wan Shih, Associate Professor in BIOMED, were noted in an October 23, 2009 Philadelphia Business Journal article for their winning the University City Science Center's QED award. The story also appeared in BizJournals.com, Austin Business Journal, Puget Sound Business Journal, Atlanta Business Journal, Tampa Bay Business Journal, Business First of Columbia, Washington Business Journal, Wichita Business Journal, Baltimore Business Journal, Pittsburgh Business Journal, San Antonio Business Journal, San Francisco Business Journal, Business Journal of Phoenix, Houston Business Journal, TMCnet.com, Yahoo! Finance and MarketWatch.com. For the full story, please visit: http://philadelphia.bizjournals.com/philadelphia/stories/2009/10/19/daily25.html

BIOMED Leads Health Innovations Partnership-Southeastern Pennsylvania Initiative

The Ben Franklin Technology Development Authority (BFTDA) – Commonwealth of Pennsylvania funded the Health Innovations Partnership–Southeastern Pennsylvania (HIP-SEP) to spearhead the creation of a 'regional innovation community.' The kickoff meeting was held at the Science Center on January 25, 2010. Drexel Biomed is leading this initiative in partnership with regional universities, research institutions, economic development agencies and representatives from the legal, business, investment and venture communities.



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